THE POLITICAL ECONOMY OF AGRICULTURAL DEVELOPMENT IN NIGERIA

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ABSTRACT

The Political Economy of Agricultural Development in Nigeria

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This dissertation is a case study, which examines the state of agricultural development in Nigeria. The study is intended to be a mirror for a wider undertanding of the state of agriculture Sub-Saharan African (SSA). Pitching its tent in a typical rural Nigerian agrarian community, and applying the political economy ideological framework, the study examines factors that impact and shape agricultural production in the country. It employs the plethora of social research techniques at the disposal of applied anthropologists including structured and unstructured interviews, questionnaires, participant observation, probing for history, and the use of photography and video recording among others. The study worked with a wide focus group including farmers, traders and government officials and analyzes field data through descriptive data analysis; the use of tables and charts; and comparing of results with related studies.

The study found that many factors form a landscape and conspiracy of far-reaching significant negative impact on Nigerian farmers and hence on the agriculture sector of the whole country. The factors negatively impacting agricultural development in Nigeria include land tenure systems rooted in the social organization of farming communities; continually increasing populations against limited and constantly decreasing farmland size; lack of capital especially for the adoption of improved agricultural production technology; incessant conflicts; mass rural-urban migration; low level of education; repressive and exploitative State apparatus; systemic corruption of government officials; excessive dependence of oil economy to the exclusion of agricultural economy; application of institutional and economic development policies that are unfavorable to the agriculture sector; and poor or total lack of infrastructure among others.

Correspondingly, the constellation of unfavorable social condition these factors create produces very far-reaching consequences for farmers and the country at large: farmers produce at levels of productivity below their potential; food insecurity; constantly rising poverty especially among rural farmers; roof-high rate of unemployment; backwardness in other sectors of the economy; malnourishment-induced poor health and reduced length of life; conflicts among and between communities as a result of poverty and hunger; sharp fall of farmers' contribution to the GDP; inability of rural agricultural development to translate into community development; entrenched poverty cycle; and general backwardness in the socioeconomics of Nigerian farmers.

In response to these telling findings, and in order to mitigate if not overcome the factors and sociopolitical, economic and institutional factors and conditions that militate against agricultural development in Nigeria, the study lays out some recommnedations revolving around the installation and maintenance of policies that are pro-poor and pro-agriculture in order especially to boost agricultural productivity and ultimately to help lift farmers out of the assaults of poverty, food insecurity, hunger, and other problems that go with these. The recommendations fronted by the study cover the areas of the problems discovered especially that there needs to be installed institutions to effect changes in land tenure system; improvement in conflict management and resolutioon; giving back the democracy of agricultural production to farmers by restoring the sector and its former place in the overall economy; disengaging agriculture from its entrenchment in the "project" disposition associated with the development ideology; and above all, allowing agriculture to be a "process" in the hands of the people. In engaging in this on-going dislogue, this study has set to its merit the standard of how an applied anthropologist can contribute to wider study and understanding of social issues in Nigeria and in SSA at large.

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ACKNOWLEDGEMENT

"Arriving" at this level of self-actuation in intellectual development and academic pursuit entails a lot of multi-layer dependence on many people I have rolled upon whose lives in many ways have inspired and challenged me. I have stood on the shoulders of many people to arrive at this point which opens up but an introduction into yet a watershed for the start of another life-long course of my life. To them all I owe eternal gratitude and hereby mention but a few.

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1 Ezinne is a compound Igbo word: Ezi meaning good; and Nne meaning mother—both of which, therefore, meaning "Good mother." Ezinne was a title of recognition conferred on my mother in 2005 by the Catholic Diocese of Umuahia for her outstanding and exemplary life and contribution to our parochial Faith-Community and Diocese. However, before she was given this recognition at the Church level, my mother was already a role-model and exceptionally good woman and mother to me and my two older male siblings and was known as such in our entire local polity of Umuobia Autonomous Community in Umuahia South Local Government Area of Abia State, Nigeria.

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PREFACE

From Farming as a Way of Being in the World to the Political Economy of Agriculture

This dissertation is a long story. It is a metanarrative of how I discovered agriculture as life and science. Sequencing the story in that order, I begin by recalling how I experienced and still experience agricultural production as a way of life, a way of being in the world in which I engaged myself first without questioning. The second part, on the other hand, takes the story to another level: doing agriculture as science from the perspective of social science inquiry. At the end of it all, I surprised myself by waking to the realization that the second part did not distance me away from agriculture as the lived science (read experience) of interaction in specific environments that need to be explored and understood. This, therefore, means that I ended up at the same point of the departure of my inquiry where the business of this anthropological inquiry collapses into one and the same thing: no matter how we may push agricultural production to the realm of science, it fails to pay its way if it is not lived as life; indeed, as a process. Let us tell the story-an odd preface.

Phase 1: ***Agriculture Production as Lived Life***

At this level I joined my family in carrying out everything and every stage of farming that eventuated in food, and sometimes money. When I was in the primary school and at about the age of twelve (12), my father gave me—at my request—a small plot of land right in front of our family house where we lived in a rural village. On this land I experimented on my inexperience on cultivation of some few crops including yam, maize, and groundnuts. For manure I depended on dead grass from bushes around; however, I depended more on ashes and decomposable refuse from my mother's kitchen. I learnt from my classroom teacher that these organic substances are very helpful in boosting crop yield; agricultural scientists call it "organic farming." My harvests were impressive; this fired up my interest in cultivating my talents in the cultivation of the earth.

Still as a primary school child I extended my dialogue with farming to the keeping of a very small number of improved species of poultry birds but only for meat production. The memory is still green in me how I woke up many times every night to attend to my birds: if the lamp in their pen was still on; if they had water and feed in their troughs; and during cold (rainy season), if the birds had sufficient heat from a small stove I set up with a short sheet of zinc over it to make for radiation of the heat from the kerosene-powered stove. Again, I was successful.

When I completed my primary education I was not lucky to be one of those children who lived in the boarding house schools; I attended school from home till I finished. Being a day-student paid off many dividends including helping my parents with many domestic chores, learning the art of surviving in hardship, acquiring the skill of village petty trading, and above all continuing with fanning the ambers of my daily growing interest in crop and animal husbandry. With my father's permission I set up a fairly big mud structure within our family compound; the structure measured about 30ft by 10ft with ventilation space running end to end of the long way. My habit of sleeplessness in attending to birds deepened with my first 72 crop of birds—day-old chicks I started the structure with. It was a Red Indian Rhode breed of birds intended exclusively for egg-laying. Birds raised for this purpose last many months before they begin to drop eggs: from day-old start-offs through to the age of pullets to layers and are accordingly fed on chicks mash, growers mash and eventually layers mash. Along these developmental stages, the birds are also vaccinated against different diseases experienced in birds. All these entail continues supply of labor but more so money (capital) to sustain the farm till the birds begin laying. To respond effectively and sustainably to this demand I intensified after-school farmland clearing and hoeing for other people in order to generate money to sustain my farm. When my birds began to lay, I began to get some six dozen eggs every day and became a known supplier of eggs to my school

teachers and others: going to school daily became an experience of school bag in one hand and crates of eggs in the other. My poultry farm paid off another great dividend: it provided much of the organic manure with which I enriched my one-plot farmland, which I subjected to year-round continuous cultivation without much earth impoverishment. Hold on to your conclusion that my parents subjected me to child labor or abuse; you are absolutely mistaken: they rather allowed me by creating an enabling environment of freedom in creativity an self-discovery without which I could not have ended up in the experience the story of which I share and preface this work with.

My art in self-creation and self-discovery in agriculture went on a long sabbatical leave when, after my secondary education I spent some two years before proceeding to the Catholic Major Seminary for the formation to the Priesthood—a vocation I nursed for too long. From 1984 through to 1992 inclusive—those eight (8) long years for my formation in Philosophy and Theology before my ordination to the Catholic Priesthood on September 6, 1992. However, while my hands may have gone on leave from crop and animal farming, my mind remained busy on it.

Immediately after my ordination in 1992 my whole being caught fire again with agriculture but much at the level of lived experience and art of being in the world; this time more in response to my new circumstances. My first assignment as a Priest put me in a condition where I was to crack new grounds in opening a Chaplaincy within an environment jointly shared by a University of Agriculture and a National Research Institute of Agriculture. My income was very low and so, re-enkindling my talent in farming was the ready answer. I chose to park my old beloved Beetle Volkswagen car outside and converted my garage into a mini-poultry farm: it paid off in a big way. This time it was a farm of birds for meat production and I had ready market around me.

A year after that appointment I was transferred to my Provincial Major Seminary to serve as an Administrative Dean of Students' Affairs and as Lecturer in Philosophy and Theology.

Again, the two passion for farming—crop and animal—traveled to my new world with me. With the mass fallow-lying plots of land within the Seminary and the ready hands of some indigenes to supply me with labor I wasted no time in striking roots in this new home. An old fallowing workshop became my poultry farm whereas some other portion was used for my cattle farm of Australian breed; over two hectares of land therein were subjected to the cultivation of maize, garden eggs, cassava and yam. With these my awareness of the problems involved in entrepreneurial and managerial skills began to grow even the more especially with creating collaborative fronts for working with other people for labor generation and the formation of market linkages. This venture lasted my three-year tenure at the Seminary (October 1993-October 1996).

In October 1996 I set my foot on a new place of assignment; it was St. Paul's parish in a far-away rural community in Ututu of Abia State where I spent two (2) years. Here too I cleaned up and converted into a poultry farm an abandoned classroom behind the parish building. The markets around provided ready market for my grown broiler birds. On April 9, 1999 I was transferred to St. Peter's parish Umuakor-Nsirimo, Umuahia in another far end of the diocese and Abia State; I spent seven (7) years in this community till May of 2006 when I relocated to Los Angeles-California, USA for missionary work and furthering my studies—fourteen14 years after my ordination to the Catholic Priesthood in 1992.

It would be historically correct to state that it was at St. Peter's parish Umuahia that my dialogue with the earth in agriculture blossomed and flourished into full-blown proportions. Here I convinced the community leaders to give the Church as much land as possible for the full development of their struggling Faith-Community. It was a very contentious gambling as many indigenes opposed me for it even to the point of arresting me on three occasions: because I was seen as a polarizing figure taking away the farmlands of some kindreds to benefit the Church. It

was here that I grew more in the consciousness of the political dimensions involved in land as the most fundamental of all factors of agricultural production as would be seen in this dissertation.

What is of significance in this part of this story is that these hectares of land were subjected to massive cultivation and production of a wide range of crops and vegetables including yams, cassava, sweet potato, maize, and garden eggs among others. On the other hand, I set up a meat production poultry farm that also thrived very well with ready markets within the City and around. Whereas it is the case that the smoking fire was coming from my passion to continue with my life in agriculture, the bigger picture here at this parish was that I set up these farm estates as an investment to help generate funds to build a lagging and long-dying parish. There was the need to build a good Church house for worship, a good and decent Rectory and provide a car for parish ministry. Post-secondary school young adults and many women in the community constituted ready hands for paid labor for the different farm projects. The vision galvanizing and sustaining this stride in agricultural investment turned out a huge and all-round success but not without sometimes challenging bumps arising from the sources of agricultural production—land, labor and capital—and related institutional and other factors. The brief photo gallery in the appendix (pp. 310-315) speaks for the accomplishments that came from this agricultural project in the parish.

Phase 2: ***The Political Economy of Agricultural Production: Applied Anthropological Inquiry***

Grappling with agriculture simply as a way of being in the world aroused in me many questions that are associated with factors impacting agricultural production especially among farmers in rural parts of the world like where I discovered and practiced it. From my own personal experiences, I entered into the level of extending and broadening the base of my consciousness into parameters beyond my specific world. From this arose this case study focused on the political economy of agricultural development in Nigeria and Sub-Saharan Africa (SSA).

OVERALL INTRODUCTION

The Political Economy of Agricultural Development in Ukum Benue State, Nigeria.

This dissertation tells the story of a field research carried out for two years (2012-2015) targeting to understand sociopolitical and other factors that impact agricultural production in Sub-Saharan Africa (SSA) using a Nigerian rural farming community as an illustrative case study. The topic of the investigation is *The Political Economy of Agricultural Development in Nigeria* through which the study aims to join the on-going conversation on the state of agricultural development in the region. "*The state of food and agriculture"* has been a constant and undying preoccupation of the United Nations and has invariably generated worrisome concerns at the global, regional and national circles with the intention among others of finding out how to end hunger, reduce poverty (MDGs, 2000), guarantee sustainable agricultural production and ensure food security2 across different parts of the world of our time where it is documented that approximately 842 million people are scourged by food insecurity (FAO, 2013). Over and above this, Foresight (2011) has more telling figures that deserve attention.

> Today, there are an estimated 925 million people who suffer from hunger and perhaps an additional billion who, while having access to sufficient macronutrients, suffer from the 'hidden hunger' of not having enough vitamins and minerals (Foresight, 2011:9).

When this discussion is shifted to and focused on Nigeria and extended to SSA, the reactions and positions assumed are usually deplorable ranging from notes spelling out impressions of slow pace of growth, to those lamenting crass failure, and to those which raise the outcry of near hopelessness for the region's ability to bounce back on a good footing of agricultural

2 Many scholars like Grilj (2013) render the understanding of food security as a situation "[…] when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for active and healthy life" (p.2; see also United Nations Food and Agriculture Organization (FAO, 2013, and World Health Organization, WHO, 2013).

development and food security. Each of these voices in the conversation has reasons for its ideological stance often too evident to be overlooked or even greeted with attempted denial.

However, two observations are particularly noteworthy regarding these responses to the crisis of agricultural development in Nigeria (as in SSA): they often pay little regard to local conditions, or they gloss over them completely. Either way, we think that this posture is almost always due to their entrenchment in the politics of the development ideology3. We shall see in our opening and closing chapters (section 5) how the political leaders of post-independence Nigeria and SSA were fascinated with and got carried away in following the shadows of this ideology in what they conceived as (agricultural) development and, how this initial misstep created the sticky legacy that eventually became paradigmatic in the country. This study is an enduring interest in joining, and contributing to, this conversation at all its levels.

In our case, however, rather than stand a distance to watch the ideological polarizations on the issue of the embarrassing backwardness of the agriculture sector in Nigeria and SSA, we see the urgent need for better and in-depth examination—in the sense of ethnographic study—of the underlying factors and conditions at play. This is the sole and sustaining breath behind the scholarship undertaken in this anthropological investigation. Ours, therefore, is a response

3 Though the concept of "development" "[…] means many different things to many different people" (Apter, 1987:7; Towsley, 2009), it has, however, been the overarching defining paradigm for determining which parts of the globe belong to the "Third world" yet to attain "development" as against the "First world" laden with the moral obligation" (Moyo, 2005) of helping the former rise to the development standard of the latter. In its historical underpinnings, the coming of development projects and programs to Africa with their attendant legion of international institutions and NGOs can be rightly described as a transmutation of the original July 1944 Marshall Plan hatched in Bretton Woods, USA, established as "[…] a framework for a global system of financial and monetary management" (Moyo, 2009:10), and for a framework to inject massive funds to some of European economies that were fractured during the World War II. When this ideological landscape of development was applied to Africa, it found a niche in an already predominant art of the representation (Escobar, 1995:5) of the African as the underdeveloped, exotic "Other" who, ipso facto, was in need of development viewed as "[…] a natural unfolding of universal social process, which human agents could facilitate but which was driven by history" (Cooper, 1977:1).

undertaken in the spirit of applied anthropology4 the lens of which provides the prism through which the study is conducted. In applying the investigative, scientific spirit of anthropology, we follow and align with the tradition and legacy of economic anthropology5 which, among other things, focuses more on how people of all places and all historical moments interact with, adapt to, subdue, and transform the ecological heritage of their world with whatever tools and techniques at their disposal on the one hand, and how they themselves are in turn shaped in this process of making their living, on the other. In all this we cannot forget the myriad of factors and conditions shaping and impacting this process of subsistence.

The study is broken down into five major sections each of which consists of some chapters that are in turn sub-chaptered. All the chapters of each section look into one aspect of the main interest of our inquiry and so target some in-depth understanding of the social, political, economic, natural, environmental, cultural and institutional factors impacting agricultural development in Nigeria. While the study uses Nigeria as its study niche and by comparison extends to the entire region of SSA, the case study was carried out in Ukumland of Benue State in central Nigeria.

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4 Applied anthropology is a sub-field of the anthropological discipline "[…] concerned with the relationships between anthropological knowledge and the uses of that knowledge in the world beyond anthropology" (Chambers, 1987:309; Kottak, 2007:5). In this way applied anthropologists look beyond the borders of ethnocentrism and, guided by the ethical codes of anthropology, apply themselves and their ethnographic knowledge to a wide range of contemporary issues (Kottak, 2007:7) as is undertaken here on the state of agricultural development in SSA.

5 Economic anthropology is not a branch but a specialization in the social science of anthropology which attempts to study and explain human economic behavior in its widest historic, geographic and cultural scope. It is practiced by anthropologists and has a complex relationship with the discipline of economics, of which it is highly critical. In its content and praxis, economic anthropology focuses on the specific issues concerning human-environment interaction through which humans eke out their living while they at the same time adjust to the same environment in a variety of ways. Outstanding in championing the course of, and contributing to, economic anthropology include George Dalton, Morton H. Fried, Melvin J. Herskovits, Marshall D. Sahlins, and Elman R. Service among others.

Section one comprises of two chapters. In the first chapter we present our case statement through which we attempt an assessment of the present condition of agricultural development in Nigeria. In so doing we bring into historical perspective the experience of economic growth in the immediate post-independence moments of Nigeria: what factors led to the significant contribution of the agriculture sector to the overall GDP of that era and, in contrast, what led to the loss of that initial steam and good performance of agricultural production in Nigeria. The chapter pitches this historical backdrop against the raw facts of the region's empirically evident poverty indicators; this provides the ground for an evaluative chapter inclusion in the fifth and last section of the work. Chapter two of section one assumes the posture of a response to the facts laid out in the previous chapter and so begins with some quick and brief recapitulations of the critical issues raised in chapter one: if the backwardness in agricultural development pointed out in chapter one must be overcome, if the core preoccupation of this case study must be effectively and productively undertaken, if the factors affecting agricultural development in rural parts of Nigeria must be understood, and if agricultural development must be reshaped and repositioned in the general economic performance of the nation, then, the necessary and fundamental (study) questions must be raised; answers to the study questions thus posed must be sought through the application of appropriate study methodological techniques. For these to be realized, the study applied some interpretive mode in the form of theoretical framework to guide the study all through its stages of data collection and analyses. These are the different aspects that occupy us in chapter two.

Section two is made up of three chapters. Its first chapter—the third chapter of the dissertation—track some basic features of our study site including the *history*[6] of the evolution of

6 Not history in the purely diachronic sense of the term in which things or phenomena are dealt with as they occur or change over time. The term "history" is used here to mean an attempt at understanding the

the place with particular reference especially to the people's migration and their encounter with British colonialism. Its aim, above all, is to understand how these facts fit into the present-day agricultural life of the people so as to enlighten the inquiry. Chapter four, which occupies the second place in section two, furthers the move to gain some good understanding of the study site. It identifies the location, geography, demographics and general features of Ukumland where this study occurred. By identifying these characteristic features of our site, the study already seeks to understand how these facts predispose, enhance or inhibit the activities of agricultural production. In this way it makes the case that integrating this aspect into the kind of scientific investigation undertaken here is a fundamentally necessary condition for carrying out similar anthropological and other related social study inquiries in Nigeria and beyond. Chapter five, being the last of the three constituent parts of section two focuses on the social organization of the community chosen for the study. The sole aim of this chapter is to identify the place of social organization in the economics of agricultural production in rural parts of Nigeria and SSA, which is one of the major links missing in many programs branded (agricultural) development in SSA as in other parts of the world7. Above all the chapter is intended to illustrate how the components of a people's social organization including but not restricted to the social institutions of the family, the compound, the kindred, marriage, age-sets, religion, and gender social relations play roles in agricultural production; how they have shaped, still shape, and are in turn shaped by the phenomena of

evolutionary stages in the becoming of this agrarian people whose present situation provides us the milieu (and partly the motif) for this study.

7 Escobar (1995) and Ferguson (1994) conducted extensive ethnographies in Latin America and Africa respectively and stand lasting testimonies on how much of what is crafted and executed in the name of development is not rooted in and so does not reflect the real world and experience of the very people to whom development projects are given as gifts aimed at helping them and in which they have no say. This way they were critical of the development discourse.

agricultural production8 and social transformation. In examining these related aspects of the chapter's core concerns, we already begin to see, even if in glimpses, the roles these social organization-related facts play in determining very key areas involved in agricultural production in Nigeria and many other parts of SSA including among others methods of land acquisition/inheritance, land tenure, the generation of farm labor at various levels which, to a large extent, are still institutionalized across the region.

Section three is also divided into three chapters all of which are concerned with exploring the place of the factors of agricultural production in the region, and how the former impact the latter. Its first (and the sixth chapter of the dissertation) explores the place of land as a factor of agricultural production in SSA: it strives to understand the sources and processes of land acquisition in the sub-continent (as were teased out in the previous chapter); it takes a closer look at how cropland size, family size, population growth and pressure on land intersect with the prospects of agricultural development; in a special way, the chapter investigates the impact of land tenure system practiced in Nigerian communities on agricultural development especially in light of the social structural provisions made possible by the social organization found in many rural agrarian communities of SSA.

In its second (and seventh) chapter the study takes up the exploration of how labor as a factor of production intersects with, and impacts, agricultural development in Nigeria. In its bid, the chapter also examines the role played by the family, compound and the sexes in the generation

8 By inserting the distinction on "market agricultural production" we intend to acknowledge and different it from purely subsistence agricultural production. While the latter refers to a stage in a people's life and history whereby they produce food and other material needs purely for their own domestic consumption, the former refers to a stage—usually later in their history—whereby people produce food for market or exchange in addition to for their domestic consumption purposes.

and division of farm labor in Nigeria and many other rural parts of SSA. Of crucial importance to this chapter also includes the contributions of age-sets, men and women social and religious groups, and hired labor to the processes of farm labor in Nigeria on the one hand, and how these different tiers of labor generation impact agricultural production. Working on the theoretical assumption that the level of literacy and other aspects of the social capital of the working population matter, the chapter extends its investigation to as far as how level of education and school attendance affect agricultural productivity in the country. The chapter concludes by seeking to understand how these various aspects of farm labor generation come together to produce and maintain the harmony of social solidarity. This is done considering especially the fact that the social transformation found across many SSA agrarian communities together with present-day global capitalist market economy have in many ways brought about disintegration of the same ties. In the third chapter of this section (chapter eight of the work) the study turns to, and examines, the place and impact of capital (and related farm inputs) on agricultural development in Nigeria. It pitches the tent of its investigation between the actual experiences of farmers (the private sector) on the one hand, and the official claims of the government (the public sector), on the other. To field in more contrasting and illumining data, the chapter works with non-farmers and non-government officials in this area of the study. Equipped with data from these three areas, and further enlightened by insights from direct observation and extant literature, the chapter concludes with some strong summations that point to how policy making has shaped agricultural development in the region, and how the same state apparatus of policy instruments could also be used to reverse these same odds against the agriculture sector.

Section four is also made up of four chapters: 9, 10, 11 and 12. Chapter 9 examines what tools and techniques Nigerian farmers use (before and after colonial the era) on the one hand, and

how they impact agricultural production in the country, on the other. The chapter makes the case that farmers' continued use of unimproved farming tools and techniques has remained a major snag in the way of agricultural development in Nigeria as in other parts of SSA. The chapter also stretches as far as digging to find factors that inhibit farmers from adopting improved agricultural technologies in order to boost productivity.

Chapter ten explores the place and impact of both hard and soft infrastructure and other institutional and social services on agricultural development in Nigeria. Taking as its take-off ideological bearing the very frequently and emphatically documented need for sustainable agricultural performance—at the national, regional, and global levels—the chapter examines if there are infrastructure facilities installed in rural parts of Nigeria; if not how their absence affects farmers' performance; what could be done to put them in place in order to achieve the desired goals of food security and growth of the agriculture sector especially in light of the Millennium Development Goals (MDGs, 2000)9. Finding out whether there is effective infrastructure in the region is not so much the chapter's motif as it is finding out how this affects—enhances or impedes—agricultural development in Nigeria.

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9 The Millennium Development Goals (MDGs) of the United Nations is a pioneering course launched in the year 2000. Among its 8 goals the initiative targeted especially the reduction or poverty and overcoming of hunger by the target year 2015. The MDGs initiative has ever since remained a reference point to assess the level of performance or nations and regions of the world especially in matters food security, hunger and poverty reduction no less the other goals all of which steer the course of improving the socioeconomics and general living standards of populations across the globe. And as it applies to agricultural development in SSA—in contrast to other regions of the world—the installation of functioning infrastructure has remained a litmus test for drawing close to the MDGs since, it is argued, agricultural and general development is impossible without infrastructure facilities. Since its inception this primordial development initiative has borne many other global, regional and national responses all of which aim at realizing the targets of the 8 MDGs; SSA seems to have received more such steps especially in the area of agriculture development. Among such follow-up initiatives is the Millennium Villages project invented specifically and exclusively for "fighting hunger" in Africa with the Kenyan and Ethiopian Villages of 2004 and 2005 respectively being the very first.

Chapter eleven furthers the course of this section by taking up yet another very crucially important aspect of our research inquiry, namely, the place and impact of conflict on agricultural development in Nigeria for mirroring what obtains in other parts of SSA. Couched more on the fact that conflict-led feud and fission quickly characterized the migration episodes of the primordial Tiv community—and has ever since remained part of them as a people—this chapter tracks what factors that lead to conflict and its impact on Nigerian agrarian communities. The chapter also concerns itself with what conflict management instruments the government of Nigeria has in place and examines their effectiveness especially in view of the fact that political stability is a prerequisite for sustainable agricultural development anywhere else in the world. By extending its investigation thus far the chapter searches for better ways of containing conflict in order to guarantee continued positive performance of the agriculture sector in Nigeria and SSA.

Chapter twelve is the last part of section four and examines the impact of State apparatus on farmers and traders in Nigeria. Digging back into the archaeology of the origin and purpose of the market social institution in Ukumland, the chapter contrasts what obtained in the market in the past with what role the State pays in it currently. Beyond the contrasting comparison the chapter aims to find out how the presence and role of the State I the activities of farmers and traders impact agricultural development in the country. The need to extend the curiosities of this study to this area arose from the findings of the preceding chapters and how the public sector was not meaningfully represented in terms of its duties to provide farmers with requisite assistance that would eventuate in the boosting of agricultural productivity and guarantee sustainable agricultural development.

Section Five constitutes the last part of this work and is made up of three chapters. The whole business of this section is an ethnography informed response to the rich findings of the earlier chapters. It serves the purpose of proposing the forward to sustainable agricultural

development in Nigeria. To do this the first of its three chapters—chapter 13—brings into context what attempts the Nigerian government has done in the name of agricultural development since independence. It seeks to see if those attempts worked and, if they failed why they did fail. The failure of those earlier steps towards agricultural development is not so much the concern of the chapter as it is why they did not work in order to introduce better ways to correct the initial errors.

Chapter 14 of section 5 the study stands on the pillar-point of chapter 13—that the decade-long formulation and implementation of policies that were unfavorable to agriculture killed the prospects of the sector—to make a closer examination of the discovery and exploration of crude oil on which Nigeria has over-depended to the detriment of the agriculture economy which it neglects further derailed the development of sustainable agriculture in Nigeria. The chapter closely examines how the use of policies in favor of oil led to the neglect and sometimes abandonment of agricultural development programs that were even introduced in between when Nigeria fell into the many negative effects of backwardness in agriculture. The chapter also looks into other ways Nigeria's fixation with, and addiction to, oil and assesses how, overall, this trend has impacted and still impacts agricultural development with its many resultant dire consequences in the country.

Chapter 15, being the last of this section and of the entire work, constitutes the hub of our response to the findings of the foregoing chapters. It is the application of the knowledge gathered in employing *political economy* as the trope and appropriate interpretive paradigm for studying rural agricultural development in Nigeria. The chapter proceeds in three logically connected sub-sections: the first furtively recapitulates the study findings in order to position the whole adventure for making policy recommendations aimed at improving Nigeria's agriculture sector; the second part embarks on a brief cross-continental comparison but only with the view to stressing once again why Nigeria's agriculture sector lags behind; the final sub-chapter anchors itself on the first

two to launch the position of the present researcher: ***the democracy of rural agricultural development in Nigeria10***. As its main contribution to the on-going discourse, it argues that only when agricultural development is conducted not as a *project* but as a *process* that it can reclaim its place in the overall gamut of Nigeria's economy. It argues that Nigeria's agricultural development will become a resounding success when, and if, it is taken away from the hands of the development "experts" and policy ideologists and thrust in the hands of real farmers who engineer the process of agricultural development in the country. When this is done, rural agricultural development becomes a tool for social and community development since both collapse into one in Nigeria.

10 This insight is inspired by the writings of Claude Ake (1966) in which he argues—and convinces the present writer—that it is only when rural agriculture is put in the hands of the very rural farming populations of the region on the one hand, and only when agricultural production in SSA is exercised not in the spirit of a project (the spirit of the development ideology) but allowed to unfold as a process, on the other, can agriculture begin to live out its calling and fulfill its mission as the hope of SSA communities for whom the main, and sometimes the only, occupation is farming, and who generate about 90 percent of the region's domestic food need in addition to contributing in large measure to the GDP of the region.

SECTION ONE: AGRICULTURAL DEVELOPMENT IN NIGERIA

Chapter 1: Contextualizing the Study

1.1 *Chapter Overview*

In this, the very first chapter of this work, we set the stage and tone of what informs this case study preoccupied with investigating the goings on with agricultural development in Nigeria and the region of the world designated as Sub-Saharan Africa (SSA). It is common knowledge to many across the globe, namely, that the agriculture sector of SSA—like many other aspects of its life—is backward to say the least. By backwardness of the agriculture sector of SSA is meant that, for many reasons, it performs at a level of productivity far less than its full potential. As we shall see, this is readily shown in the facts of hunger, food insecurity, malnutrition, high rate of food importation, general poverty among other problems associated with low agricultural productivity across different parts of the region. As many scholarly studies demonstrate, this very important part of the region's overall economy is fractured and dysfunctional. In connection with this we cast a look at what happened to and within the agriculture sector immediately after the nations of SSA became independent in the early 1960s. This quick historicizing discourse helps to raise the obvious question as to why agriculture failed to put countries of SSA on the path of economic growth in addition to accomplishing the basic functions of providing sufficient food and lifting people out of poverty, the same goals it fulfills among other world regions. If this chapter fails to stress any point at this initial stage of our project, it would not fail to bring to a sharper focus the fact that, while agriculture held (and still holds) the opportunities to put the economies of SSA nations on a solid and sustainable footing, and while the region is endowed with all the natural and human resources to grow, its agriculture sector (as with its general economy) has wobbled all through these post-independence decades. The chapter does not end its curious inquiry with

identifying the well documented fact that the agriculture sector of post-colonial SSA fared very poorly; it stretches as far as striving to understand why it failed in the first place. Using the Nigerian experience of what took place in the name of agricultural development, the chapter identifies a set of intermeshing factors that explain why agriculture did not do well at that initial stage. If, however, it did not do well at that early stage, the chapter strives to find out if it picked up and fared well afterwards. The fact that the region is still saddled with the burdens of poverty, hunger, food insecurity, high rate of unemployment, sociopolitical and economic backwardness, and other poverty indicators that attract aid interventions seems to very readily answer that question as well as seems to provide answer to the unspoken question as to why this economic anthropological study is undertaken aimed to understanding the factors impacting agricultural development in the region. This is the business of this chapter

1.2 *The State of Agricultural Development in Nigeria and Sub-Saharan Africa (SSA)*

Sub-Saharan Africa has repeatedly been characterized as a region ravaged by the crises of hunger, poverty and food insecurity among other problems. This is further exacerbated by population increase which outpaces food production per capita the latter of which is in decline; this situation also results in the concomitant effect of increased importation of food in the region (Delgado and Mellor, 1984). It is not surprising, that the World Bank (2005a, 2005b) declared the sub-region as one of the poorest in the world with 46.4 percent of its people living on less than $1 a day in 2001 (see also Adeyemi et al., 2009). These facts are without prejudice to the projection of the United Nations Food and Agriculture Organization (FAO, 2009) which claims that,

> After decades of decline in per capita food production, a new optimism has emerged about the prospects for Africa and African agriculture. Growth in agriculture and in the economy as a whole has outpaced population growth in many countries, armed conflicts have been reduced, regional and sub-regional institutions are being strengthened, and good progress has been made in developing the business environment. There is wide agreement that African agriculture has enormous potential for growth thanks to its abundant natural resources, namely land and water.

As we shall see in the course of this work, our study findings and evidence-based general knowledge of the social, political, institutional and other complex landscape of factors in the region inform us otherwise, hence our objection to the cited FAO (2009) claim. For, while it is true that "[…] African agriculture has enormous potential for growth thanks to its abundant natural resources, namely land and water"—though the document seems to be forgetful of the energetic, teaming workforce of the region without which the said "abundant natural resources" amount to nothing—our observation is that the emergence of the said new optimism "[…] about the prospects for Africa and African Agriculture," and the claim that "Growth in agriculture and in the economy as a whole has outpaced population growth in many countries, armed conflicts have been reduced, regional and sub-regional institutions are being strengthened, and good progress has been made in developing the business environment" are negated by horrendous odds that stand against agricultural development and other aspects of life in the region including and especially, 1) daily escalation of political unrest and related violent conflicts (see chapter 10, section 4); 2) poor infrastructure or lack thereof; 3) poor and or fractured public and private sociopolitical institutions; 4) high rate of poverty and low socioeconomics of farming populations; 5) low level of literacy and school attendance among others, all of which militate against growth in agricultural production in particular and economic growth in general. All the same, let us take refuge, at least for now, in the hopes that the new optimism would be realized and made sustainable.

For some scholars the case of SSA food crisis is not just serious but alarmingly lamentable. While many argue that SSA has been struggling with food insecurity for almost half a century (Rademacher, 2008), the findings of many others such as Eicher (1982) are more specific stating that the most intractable food-related problems facing the world in the 1980s, was "[…] the food and hunger crisis in sub-Saharan Africa—the poorest part of the world" (p.151). It is interesting to

note that the situation represented above has not changed much even after decades; instead one would be right to assert that it has got even worse especially with the on-going wars and conflicts sweeping across the face of the sub-continent (Morgan and Solarz, 1994; Richardson and Sen, 1996; Collier, 2006; Achodo, 2000; Porter et al., 2005; World Bank, 2007; Arias, et al., 2013; Kimenyi et al., 2014). This is more so as these wars and conflicts not only disrupt agricultural activities in the affected areas but also ravage and decimate especially the rural populations who produce greater part of the food need of the region (Ibeawuchi, 2007; Ake, 1996). This makes for putting in perspective the fact that over 70 per cent of SSA population is rural most of whom depends mainly on agriculture (Morgan and Solarz, 1994; USAID, 1997; Ake, 1996).

Accordingly, the region's food crisis has become a ready-at-hand motif for interventions of all kinds—at the national, regional and global levels—all of which claim to proffer solutions to problems associated with food insecurity in the region. Outstanding among such steps include the initiative of the Earth Institute11 which targets the reduction of poverty and hunger summed up in the vision of the Millennium Villages Project (MVP, 2002) conceived as a vision that "offers a bold, innovative model for helping African communities lift themselves out of extreme poverty" (p.1). Conceived exclusively for countries of SSA the MVP network is claimed to have reached nearly 400,000 people within the territories of the 79 African villages covering ten countries including Ethiopia, Ghana, Kenya, Malawi, Mali, Rwanda, Senegal, Tanzania, Uganda and Nigeria. It is strikingly worth noting here that, with the amount of wealth and foreign exchange earnings it gets every year from the exports of petroleum products alone, it is embarrassing to see

11 The Earth Institute was established at Columbia University in 1995. The research institute's stated mission is to address complex issues facing the planet and its inhabitants, with particular focus on sustainable development and the needs of the world's poor. The Institute's activities are guided by the idea that science and technological tools that already exist could be applied to greatly improve conditions for the world's poor, while preserving the natural systems that support life on Earth. Applied to SSA it assumed the posture of the Millennium Villages Project (MVP, 2000).

that Nigeria is chronicled as one of very poor and not-doing well countries whose citizens live under less than $1 a day, and receives development aids in the 21st century! In design the MVP was presented as a community-led and community-centered program "tailored to the villages' specific needs" (MVP, 1995: 1; Puri et al., 2009). While the main target of MVP is poverty reduction in the region, it also claims to address the case of food insecurity and all its socioeconomic correlates in the region. This aligns with the United Nations Food Summit (1996) which underscores the fundamentality of food among all basic human needs.

As a follow up we recall here the Millennium Development Goals (MDGs, 2000) initiative, which puts "ending poverty and hunger" as number one among its 8 goals. While many studies lament the general socioeconomic and political backwardness of SSA (Easterly and Levin, 1997), others see hope for improvement anchored on investing more on agricultural production.

> There is overwhelming evidence in recent decades that Sub-Saharan Africa has not enjoyed the economic and social progress occurring in other parts of the world. This is of great concern to national governments within the region as well as to the international donor community. A high percentage of the people in this vast subcontinent depends on agriculture for their livelihood. Improvements within the sector can unlock the door to social and economic improvement. Indeed, *agriculture must be the engine for economic and social progress*[12] (USAID, 1997:v; emphasis ours)

1.3 *Post-Colonial Situation of Agricultural Development in SSA*

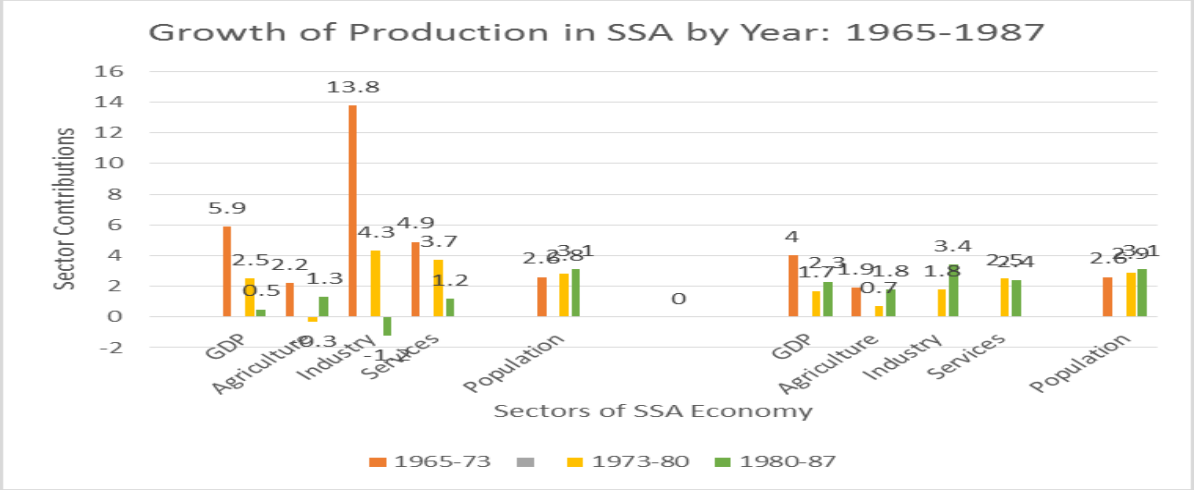
Some strong points lend voice to the foregoing statements on SSA; we very briefly rehash some of them here in order to put our case study in proper historical context. First, in the immediate post-independence era the region as a whole registered an impressive performance of economic growth to which agriculture was a major contributor to the GDP for the period 1965-87; this is in

12 We take and apply the concept of "social progress" here understood in the sense of the idea that societies can or do improve in terms of their social, political and economic structures. This may happen as a result of direct human action, as in social enterprise or through social activism among others. As such we do not subscribe to its political undertone of 19th century social evolutionism introduced by August Comte (1798-1857) and Herbert Spencer (1820-1903).

spite of intervening periods of fall in output due to drought especially among the Sahel countries (World Bank, 1989a; Morgan and Solarz, 1994). This is evident from the data in the table (1.1) that follows, which we adapted just for the purposes of this study.

Table 1: *Growth of Production in Sub-Saharan Africa: 1965-1987 (average annual per cent)*

	1965-73	1973-80	1980-87
GDP	5.9	2.5	0.5
Agriculture	2.2	-0.3	1.3
Industry	13.8	4.3	-1.2
Services	4.9	3.7	1.2
Population	2.6	2.8	3.1
		(Excluding Nigeria)	
GDP	4	1.7	2.3
Agriculture	1.9	0.7	1.8
Industry		1.8	3.4
Services		2.5	2.4
Population	2.6	2.9	3.1



Sources—*Data from World Bank 1989a, 222-23 and 269*

A quick look at the data in the above table and the corresponding chart highlights the nature of the general economic growth and the meaningful contribution of the agriculture sector at the very early stages immediately after parts of SSA gained independence from European forces notwithstanding the decline of the 1973-80 period. Morgan and Solarz (1994) proffer two major reasons for the 1980s decline in the contribution of agriculture to the overall GDP of SSA:

> In the 1980s drought affected most of Sub-Saharan Africa […] and followed a further oil-price hike in 1979-80 accompanied by increasingly adverse effects from international debt during the decade (p.59)

In spite of this drop for the stated reasons, the contribution of the agriculture sector picked up a little again to 1.3 per cent per annum for 1980-87 and rose even higher by the end of the decade with the result that the growth rate in 1980-90 was 2.1 per cent (World Bank, 1989b:167 and 1992:221). These initial trends in the contribution of the agriculture sector to the GDP of SSA will soon tilt and fade away and for various reasons, usually policy, as the case of Nigeria will readily illustrates later.

1.4 *Poverty in Sub-Saharan Africa: Indicators and Empirical Evidence*

If, and as has been very strongly demonstrated, that "[…agriculture must be the engine for economic and social progress" for SSA (USAID, 1997:v), then, a two-sided urgent question arises at this point: first, why does SSA remain poor and indeed classified as "[…] the poorest part of the world" (Eicher, 1982) and the "[…] ultra poor of the world" (USAID, 1997:8), when it is vested with both abundant arable land and an industrious labor force to cultivate it and make the agriculture sector a more resourceful engine of general economic growth and hence a catalyst for poverty reduction and food insecurity? Second, if, and when, these unfavorable conditions persist in the region, what are the actual and possible consequences, especially as they apply to rural farming households who, besides being poor are also the drivers of agricultural production of SSA.

We find answers to these nagging questions by x-raying the level of social, economic and political development (or underdevelopment?) of the region; this can be easily assessed by looking at the current poverty indicators of the region. At least for now, we appeal to the United Nations reports and other sources for our insights here: 1) on the average, 45 to 50 percent of SSA's 726 million people live below the UN international poverty line of US $1 a day; 2) The region is the only one in the world where the proportion of people below the poverty line has been on the increase; 3) based on the above two poverty indicators—further buttressed by the region's high

rate of poverty gap[13]—it is strikingly noteworthy that the poor in SSA are relatively worse off than the poor in the rest of the world; this can be seen in the table (1.2) below.

Table 2: *Poverty Gap Index, by Region, 1990-2001 (%)*

	1990	1999	2001
East Asia	8.9	4.2	3.9
South-East Asia	3.8	2	1.7
South Asia	10.3	7.1	7.1
North Africa	0.5	0.3	0.3
Sub-Saharan Africa	19.5	18.6	20.5

Source—Economic Report on Africa (2005); referenced in USAID, 2007

4) SSA registers a dismal low rate of primary school enrolment; for example, the average gross primary enrolment rate was around 67 per cent compared to 94 per cent for South Asia; 5). In matters of health services, the region also falls behind in most of the countries, with more than 200 million people—a statistical estimate we think is too modest—having no access to health services and reflecting in an average mortality rate of 93 people per every 1000; 6) Similarly, the percentage of SSA inhabitants with access to improved water sources and sanitation is very alarmingly low especially when compared to other parts of the world; 7) SSA is very backward in the installation and maintenance of both hard and soft infrastructure which are a *conditio sine qua non* for the attainment of any appreciable levels of integral and sustainable social and economic development; 8) Closely related to the above, SSA is notably backward in social and economic development as is measured by the fact that the region is still many hundreds of miles away from approximating the 2015 target year of the Millennium Development Goals (MDGs) launched in 2000.

The above poverty indicators of SSA measured especially against the background of the MDGs vividly underscore why SESRTCIC[14] (2007) writes:

> A review made by the World Bank, to find out to what extent progress has been made on reaching the above mentioned goals, suggests that most countries [of SSA] are off the track

13 Poverty gap is a relative measure which is calculated as the poverty headcount ratio multiplied by the difference between the poverty line and average income of the population living under poverty line (USAID, 1997:6).

14 SESRTCIC is an acronym for Statistical, Economic and Social Research and Training Centre for Islamic Countries.

> on most of the targets and will need to increase the rate of progress. However, countries in the Southern Africa seem to be on the track (citing *Findings*, World Bank, 2002)

A more recent report to the UN Secretary General (UN Millennium Project, 2005) provides a comprehensive review of the progress made towards the Millennium Development Goals so far and identifies challenges in meeting these goals. In its general remarks on SSA, it concludes that,

> The region is off track to meet every Millennium Development Goal. It has the highest rate of undernourishment, with one-third of the population below the minimum level of dietary energy consumption [….]

Furthermore, the report acknowledges that SSA is burdened with poor geographical endowments; has the highest risks associated with agriculture, high transport and high level of malaria infestation. The table (1.3) below illustrates the comparative details. These indices of poor performance on the part of countries of SSA are further strongly buttressed by the United Nations Global Monitoring Report (2006).

Table1.3:*Agriculture Risk, Transport Risk, Malaria Risk in SSA Compared to other World Regions*

	Agriculture Risk	Transport Risk	Malaria Risk
East Asia	0.68	0.27	0.04
Central Asia	0.31	0.41	0
Middle East and North Africa	0.71	0.36	0.02
South Asia	0.86	0.26	0.02
Sub-Saharan Africa	0.86	0.52	0.04

Source—UN Millennium Project, 2005 (adapted for this study)

Underscoring the paramount importance of agriculture in economic development, the International Fund for Agricultural Development (IFAD, 2001) records that about 60 per cent of the OIC member states in SSA live in the rural areas and have agriculture as its main occupation. As a result, being the largest part of the economy of the region, agriculture can have an important role to play in pro-poor growth policies. On the strength of these facts IFAD (2001) concludes:

> Improvements in agricultural productivity lead directly to increases in food production. In addition to economic benefits of producing more food and therefore having greater access to consumption of food, higher agricultural productivity contributes directly to improved

nutrition for the poor. Improved nutrition means better health. Therefore, the importance of agricultural productivity for SSA cannot be overstated.

1.5 *SSA's Poor Economic Growth against the Agriculture Sector: The Case of Nigeria*

Nigeria's agricultural development plans and policies can better be understood within the wider spectrum of its strides at general development and will thus be appraised here. At independence many African leaders including those of Nigeria had no real plans for the development of their regions. As Claude Ake (1996:18) repeatedly refrains, "[…] the point is not so much that the development project has failed as that it never got started in the first place." If, and when, "development" found space in their plan at all, it was more of a mimicry rendered as a quest for "catching up with the West" (Ake. 1996:8). What accounts for this is that postcolonial African leaders were engrossed in often brutal struggle for power that everything else, including development itself, was marginalized to the fringe (Ake, 1996:16). Having lost the steam and opportunities for a nationalist revolution, that is, a plan growing out of a development strategy rooted in the social needs and emanating from the cultural and historical realities of Africa, they finally "[…] opted for dependent development[15], letting their metropolitan patrons determine the agenda and find the resources to implement it" (Ake, 1996:40).

When it comes to agricultural development specifically, it is noteworthy that the multilateral development agencies, and more so, the World Bank and donor countries, showed higher interest in agricultural development than did most African leaders who themselves were

15 *Dependent development* is a central concept of the dependency theory. Rather than view the world's nations dividing economic labor and interacting as equal players and partners, the protagonists of dependent development theoretical framework suggest and argue that some nations have the ability to impose unequal exchanges on others and so retard the economic development of these nations or make their development dependent on stronger or more advanced economies. Accordingly, dependent development has typically involved the exporting of primary resources and so is almost always associated with Colonialism, Imperialism, and Metropolis-Hinterland and or Core-Periphery theories (See also David E. Apter, 1987).

more focused on industrialization (Ake, 1996:46). The World Bank's (1993a:109) higher interest in Africa's agricultural development is shown in its stand that also shaped its lending preferences:

> Agriculture still accounts for about a third of the region's GDP, and its role in economic transformation is crucial for its provision of investment capital, foreign exchange, and labor to other sectors of the economy. Agricultural production is also the most important source of the income needed to improve food security and reduce poverty, as most of the poor and food insecure are rural people

Ironically, while the World Bank demonstrated its favor for agricultural development, it also decried that agricultural projects in Africa failed to do well. As it stands, African leaders' struggle for power and wealth accumulation to the detriment of development priorities of their nations explain this misplacement of priorities regarding the neglect of agricultural development.

The easily observable overall trend in the Nigerian case—as in other countries of the region—is that agriculture was accorded very negligible place in the country's annual budget allocations. For example, only about 9 per cent of total expenditure was allocated to agriculture in 1978. This is against the background that,

> Agriculture is the area where policies touch the lives of the majority of people. In Africa 50 to 80 percent of the population lives in rural areas, and this rural population is predominantly peasant farmers. Agriculture accounts for about 40 percent of gross domestic product, 30 percent of exports, and 75 percent of employment (Ake, 1996:45)

We must stress again that many other studies have also underscored the fact that the agriculture sector is crucially important in the overall economic growth of Nigeria as with other parts of SSA for the facts that it plays a critical role in poverty reduction in Nigeria where over 40 percent of the GDP comes from it, and it employs about 60 percent of the workforce (Nwafor et al., 2011; Oyakhilomen and Zibah, 2014). These findings are further buttressed by the fact that Nigerian smallholder rural farmers, according Ake (1996:52), account for 90 per cent of the domestic food supply; that is, the same greater percentage of Nigeria's population for whom agriculture provides ready employment (Tersoo, 2014). For the same reason, it is argued that any

successful development plan must target raising agricultural productivity in rural areas, which is considered a Green Revolution to raise food output (SESRTCIC, 2007:12; UN Millennium Project, 2005).

The galloping backwardness, if not crass failure, of the agriculture sector to adequately take care of the food need of the Nigerian population is better appreciated in the context of the general indicators of its overall economic development history. As Sala-i-Martin and Subramanian (2003) study details, Nigeria has been a disastrous development experience. On just about every conceivable metric, Nigeria's performance since independence has been dismal. In PPP[16] terms, Nigeria's per capita GDP was US$1,113 in 1970 and was estimated to have remained at US$1,084 in 2000. The latter figure places Nigeria among the 15 poorest nations in the world for which such data are available. Repeatedly, it has been stressed that Nigeria is very poor in economic growth (World Bank, 1996; Sachs and Warner, 1995; Sachs and Warner, 1997; The Guardian, 2002). This situation is often founded on the fact, according to UNESCO (2010), that about 92 percent of Nigeria's population survives on less than $2 daily, while about 71 percent survives on less than $1 daily, "[…] a major embarrassment for the supposed "Giant of Africa" (UNESCO, 2010:1).

Unfortunately, Nigeria fares much worse on measures of poverty and income distribution. Between 1970 and 2000, the poverty rate, measured as the share of the population subsisting on less than US$1 per day increased from close to 36 percent to under 70 percent. This translates into an increase in the number of the poor from about US$19 million in 1970 to a staggering US$90 million in 2000. Similarly, the income distribution also deteriorated very sharply: over time more

16 The acronym 'PPP' which stands for "Purchasing Power Parity" is an economic theory that estimates the amount of adjustment needed on the exchange rate between countries in order for the exchange to be equivalent to each currency's purchasing power.

and more people have been pushed towards poverty whose condition sharply contrasts with a very small number of people who fall within the brackets of extreme wealth.

When these facts of Nigeria's poverty indicators are placed against the fact that agriculture has been amply demonstrated as the engine of its economic growth and poverty reduction—which has been our standing ideological point of argument in this section of our study—it becomes rather urgent and imperative for us to look closely and critically at what Nigeria did in the name of agricultural development in the decades immediately after independence. For the sake of this study, only some quick periodization in accordance with the stages of agricultural development policies undertaken by the Federal Government of Nigeria would be attempted here.

1.6 *Conclusion: Chapter Summations*

From the foregoing some points are derivable in view of our study focus; they include:

1) Leaders of post-independence SSA forfeited the imperative of an urgent inward-looking revolution in agricultural and general development for their struggle over power and the greed for wealth accumulation; this frustrated development plans for growth they never prioritized.

2) When agricultural development plans were floated at all they lacked in real visions and so successively failed because they fostered corruption intended and embedded in the plans at all.

3) Logically, rural small household farming populations who produce greater part of the food need of SSA have been continually abandoned to the shadows of poverty/hunger amidst plenty.

4) Incredible sums of money were wasted on annual food importation though some of the imported food stuffs could be produced domestically at far less reduced costs of production.

5) On account of this consistent "neglect of agricultural investment" (Morgan and Solarz, 1994; Ake, 1996), political rhetoric notwithstanding, the region has continued to experience the correlated concomitant effects especially food insecurity, increased poverty and hunger, high

unemployment rate (especially in the rural areas); fall in the contribution of the agriculture sector to GDP, and so unable to catch up with the high-stake however realizable ideals of the MDGs. 6) These same study findings arouse the sense of urgency acting as a catalyst for comprehensive search for ways out of the bottlenecks created by SSA leaders' failure regarding agriculture.

Chapter 2: Doing the Anthropology of Agricultural Development in Nigeria

2.1 *Chapter Overview*

In the first chapter we laid out some of the main characteristics of agricultural development in Nigeria in particular and Sub-Saharan Africa (SSA) in general; in the process of this we brought the poverty indicators of the region into perspective. Our aim for laying out these historical antecedents was to illustrate the pivotal importance of the agriculture sector, how it portends to alleviating poverty and food insecurity, and to stress the fact that its backwardness lies in the fact that it has not been accorded primacy of place in the whole gamut of the region's economic life. In like manner we historicized the stages of Nigeria's experimentation with agricultural development in the immediate post-colonial moments of the country's history as a typification of what cuts across other parts of SSA. In all these we brought to a sharper focus one central point: that agriculture holds the key to the much desired economic wellbeing of the country as in other parts of SSA. Ironically, it is also the sector that has been continually neglected in development policies as is exemplified in the allocation of investment funds all rhetoric and paper publications to the contrary notwithstanding. However, all through the stages of the previous chapter, we underscored along with dozen studies that agriculture holds the pillar in salvaging the "bewildering paradox" (World Bank, 1996; Oshewolo, 2010) of the region's poverty and food insecurity. This is a major core point of our overall argument.

In response to the foregoing this study aims to demonstrate that sustainable agriculture is within the reach of Nigeria and SSA. As such, we first lay out in this chapter the methodology for carrying out the research including our guiding questions; data collection techniques applied in the process of tracking the study questions; and the theoretical framework that guided the study. The remaining part of this chapter is dedicated to examining these three intricately linked aspects.

2.2 *Study Questions*

This case study is guided by the following four questions:

- First, if, as has been repeatedly argued, rural farming households produce greater part of the food need of SSA, why are they backward in productivity and operate far below their potential?
- Second, why are rural farmers themselves the poorest of the poor in Nigeria as in other parts of SSA though they produce greater part of the food for domestic consumption and export purposes?
- Third, what social, political, economic, institutional and even cultural conditions act upon and impact agricultural production in Nigeria and other parts of SSA?
- Fourth, what could, and must, be done to stand up to, and remedy, the assaults of poverty and food insecurity among others in the sub-continent considering the place of agriculture in its overall economy?

2.3 *Research Methodology Guiding the Case Study*

In carrying out the actual research at Ukumland of Benue State, Nigeria, a set of social science research tools found appropriate were applied bearing in mind that,

> Ethnography takes the position that human behavior and the ways in which people construct and make meaning of their worlds and their lives are highly variable and **locally specific** (LeCompte and Schensul, 2010: 1; *emphasis original to authors*)

This is in consonance especially with the understanding that "All research is specific" (Bernard, 2012:61; 54). The techniques selected for this study were intended to help us in data collection and, ultimately for building up generalizable conclusions since, as Radcliff-Brown (1965:192) observes, "Science (as distinguished from history or biography) is not concerned with the particular, the unique, but with the general, with kinds, with events which recur." For, after all,

science is always in pursuit of universals understood in the sense of presuppositions that are advanced before actual investigation is done (Nietzsche, 1974:279-285). For the same reason of scientifically building up universals from particular observations that recur Malinowski (1922) very instructively writes:

> If in making a daily round of the village, certain small incidents, characteristic forms of taking food, of conversing, of doing work […] are found occurring over and over again, they should be noted down at once" (p.20)

In this last citation Malinowski (1922) not only affirms that anthropologists (and all social scientists) establish generalizable conclusions from particulars, that is, inductively, but also underscores the quintessential place of fieldnotes—"[…] they should be noted down at once"—which constitute anthropologists' handbook and companion to be readily consulted during and after the study is carried out. Thus disposed, the understated methods of data collection were selected and applied in the practicum of fieldwork through which answers to the aforementioned study questions were sought. Reasons for selecting the methods are also offered when necessary.

First, the study used both ***unstructured*** and ***semi-structured*** interviewing techniques. With the former, though "there is nothing at all informal" about it (Bernard, 2012:157), it was used to engage people in discussions by simply sitting down with them regardless of the location, their sex/gender and age. Doing this repeatedly offers the advantage of gaining trust and familiarity with people; however, it has as its major discontent that one could not be sure of people's responses especially at the initial stages of researcher-indigenes encounters. It offers the advantage of a more sensitive and robust gaze into the people's worldview. More than others, this method affirms that,

> […] the ethnographer assumes that researchers must first discover *what* people actually do and the reasons they give for doing it before trying to interpret their actions through filters from their own personal experience or theories derived from their own professional or academic disciplines (LeCompte and Schensul (2010:2)

Its other advantage is that it opens up to more pressing areas that are needed to be specifically focused on, and explored. As such, it helps to determine which areas of a study needs developing questionnaires for, and what target groups to direct them thereby leading the researcher to the application of semi-structured interviewing technique.

Second, the study applied ***semi-structured interviewing technique*** according to which interviewees and researcher are (usually) guided by questions prepared in questionnaire format. This method fits well in the use of questionnaires floated among farmers, government officials, literate traders, youths, and migrant settlers in studies as is undertaken here. It serves the special purpose among others of helping the researcher gather data from sets of people whom he might not have more than one or a few occasions of working with in the field. With this method the researcher engages his respondents with the same set of questions that however elicit free and varied responses to enrich his views of the phenomena being explored. However, this method of data collection has the disadvantage that though participants respond freely, their responses are guided by the scaling provided by the researcher. This, therefore, means that this method more or less diminishes the exercise of study participants' agency except sometimes when they are provided additional space for free opinions. This is unlike the unstructured interviewing technique, which helps "[…] people to open up and […] express themselves in their own terms, and at their own pace" (Bernard, 2012:157).

Third, the applied the method of ***probing for histories*** and ***genealogies*** through narratives. In order to get into the roots of the people's social organization, the history of the Zaki-Biam market institution, the stages of the social transformation of the area, and other related aspects of our study interest, some individuals were engaged in long and sometimes repeated probing interviews. These included traditional and religious leaders, aged men and women, market and

government officials, distinguished and "ordinary" farmers. This method offers the advantage of gathering data on areas from which one could not gather anything meaningful should he rely exclusively on questionnaires and participant observation. With this research tool the researcher probes into the minds of his interlocutors aiming to persuade them into deeper and more detailed areas that could avail him pieces of information to flesh out the study. This is done in the understanding that,

> The key to successful interviewing is learning how to probe effectively—that is, to stimulate a respondent to produce more information, without injecting yourself so much into the interaction that you only get a reflection of yourself in the data (Bernard, 2012:161)

However, it was found out that this method does not always guarantee success in getting more information with its probing "push" approach especially as it sometimes leads to the researcher making his informants uncomfortable even if inadvertently, which may eventuate in another struggle to get back on track with them. Emerson et al (1995:4) points out how participants' reactivity in ethnographic research is often provoked by the researcher's "consequential presence."

> […] the ethnographer's presence in a setting inevitably has implications and consequences for what is taking place, since the fieldworker must necessarily interact with and, hence, have some impact on those studied. But "consequential presence," often linked to *reactive effects* (that is, the effects of the ethnographer's participation on how members may talk and behave), should not be seen as "contaminating" what is observed and learned.

The above caveat notwithstanding, this method of research, as it was witnessed, produces even a much positive result in that it helps the researcher to see how much more robustly sensitive to participants' sensitivities and involvement he needed to be as he progresses in the field since especially research experience is one long, continuous learning process (Clark, 1975:99) in which the researcher comes to a better level of self-awareness as a student of society.

Fourth, and most importantly, the study applied the method of ***participant observation***. As the foundation of fieldwork in cultural anthropology (Bernard, 2012:256), participant

observation was extensively employed in this study because it is a tool that helps the researcher to "become-one-with" the people and the environment he goes out to study in order, as much as he could within the time at his disposal, to enter into, and grapple with, the "*imponderabilia*[17] *of the actual life*" of the people (Malinowski, 1922:20). Again, participant observation technique is the best way to be immersed in the social milieu (including worldview) of one's intended research population as is exemplified in many classic studies including Malinowski (1922), Smith (1997), Comitas (1962), Gregor (1977), Murphy (1985), Bohannan (1953, 1968), Forde (1964, 1946) to mention but a few—all of which tell the tale of how the ethnographer, by observing (and directly participating) in the day-to-day activities of his target population gets "in touch with the natives" as "the preliminary condition of being able to carry on successful field work" (Malinowski, 1922:8). As a research technique, participant observation disposes the student of society to get immersed in the life of those he studies.

> It is good for the Ethnographer sometimes to put aside camera, note book and pencil, and to join in himself in what is going on. He can take part in the natives' games, he can follow them on their visits and walks, sit down and listen and share in their conversations (Malinowski, 1922:21).

A researcher could float questionnaires among a people he makes no one-on-one contact with; he could interview them on the phone and, in the present era, he could engage them on Skype; in all these ways he can gather data on specific subjects of interest. However, none of these methods of data collection could take the place of or even approximate the primacy of participant observation. Confirming these about participant observation, Hunter and Whitten (1976) write:

> In this method, anthropologists immerse themselves in their subjects' way of life and at the same time attempt to observe, and analyze objectively the social behavior and culture of their subjects. This approach is often necessary because formal research tools, such as questionnaires,

17 In the sense of those things found within the life and meaning milieu of a people which, however, are imponderable—because strange to—non-indigenes. Participant observation as a method in anthropological studies has been found to be the key to "breaking" into and becoming part of a people's way of life; the very reason for which it was introduced into ethnographic research regardless of where it is carried out.

cannot be developed without some prior knowledge of the society and its language (p.18).

The distinctive nature and power of participant observation to bring the ethnographer closer to the fact of the matter lies in the fact that, "It puts you where the action is and lets you collect data…any kind of data you want, narratives or numbers" (Bernard, 2012:256). So that, if, as Kottak (2007:25) comments, ethnography is the distinctive strategy of anthropology, participant observation is the hub of all there is to ethnographic method: it gives the researcher the added advantage of building rapport and trust with his interlocutors and guides him to work better with the many tens of people and families he visits, works and lives with. With it the researcher moves freely into and around any human setting—in the farms, at homes, on the roads, at the market places—to engage and talk with people while he strives to make "sense" out of their sense. It helps him to compare data personally learned by (direct) observation with those gathered from interviews and questionnaires.

All its advantages over and above all other research techniques notwithstanding, this method has the potential of exposing the researcher to the danger of either conflating or confusing his own interpretation (the *etic*[18] view) with the indigene's meaning (the *emic*[19] view) (Kottak, 2007:29; Bernard, 2012). The real danger lies in the fact that it could lead to the loss of the true meaning of the "social facts" (Durkheim, 1984) embedded in the people's life and world and

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18 By "the etic view' is meant the anthropologist's subjective interpretation of a people's meaning which, for many reasons including prejudice, the sense of professionalism, pride of position among other, with the consequence that this study approach often misses the point of the people meaning. As Kottak (2007:29) writes: "The **etic** (scientist-oriented) approach shifts the focus from local observations, categories, explanations, and interpretations to those of the anthropologist" on the assumption that the members of a culture are often too involved in what they are doing to interpret their cultures impartially. On the contrary,

19 "An emic approach investigate how local people think. How do they perceive and categorize the world? What are their rules for behavior? What has meaning for them? How do they imagine and explain things? Operating emically, the ethnographer seeks the "native viewpoint," relying on local people to explain things and to say whether something in significant or not" (Kottak, 2007:29). In other words, the natives are the ***cultural consultants*** to the ethnographer who, ipso facto, is the student learning at their feet as they provide him with their worldview and perspective.

thereby crippling the researcher's ability to approximate "objectivity" in his investigations. Hunter and Whitten (1976) present another side of this method that could mar objective representation of facts as are lived by the researcher's subjects. According to them, "[…] there is the tendency of the researcher to become emotionally involved with the community he or she is studying" (p.18). Its other possible danger is that it portends to making anthropologists as with other social scientists become too particularistic with their fieldwork experience; that is to say, that "[…they look for the concrete social fact—the item of behavior, the description of a recognizable experience—on which to anchor an understanding of social processes" (Hunter and Whitten, 1976:18) in their search for rich descriptions of settings and behavior which they find in, and made possible by case studies.

In addition to the application of this repertoire of research techniques—none of which works alone but collaboratively and complementarily—this study made extensive use of fieldnotes, photographing, audio and video recorders. We used them because these aspects of history play very important and supportive roles in social research and in the interpretation of meaning of the past especially as they provide ready-at-hand resource materials to fall back on in the science of interpretation. For, not only "historians" but also anthropologists "use photographs to document the past" (Preucel and Hodder, 2004:574). Though "a product of a split-second," "Each image, directed by the individual behind the camera, reflects the photographer's motives for wanting to record that scene" (Preucel and Hodder, 2004: 574).

2.4 *Political Economy: Our Study Ideological Framework*

The study adopts the analytic tool of political economy as its guiding interpretive model. This choice is inspired by the fact that political economy, though a multi-pronged paradigm for analyzing social phenomena, provides a window for exploring the factors impacting agricultural development in rural parts of Nigeria in and other parts of SSA. Some of the explanatory

underpinnings for selecting political economy as the paradigm guiding the study is rooted in an insight drawn from Williams (1977:11) according to which, taking up a definitional (and or ideological) stance should start with social practices, not fully formed concepts since the meaning of ideas is forged in concrete social practices. It is assumed here that the social practices of agricultural production (including the market institution) in rural Nigeria and SSA constitute typical instances of social practices against which the assumptions upon which this study is predicated are tested. The operational content and logic of political economy will be teased out here in order to throw light on why it was selected as the analytic tool for this study.

Following the lead of Eatwell, Milgate and Newman (1987), "political economy is the science of wealth" and "deals with efforts made by man to supply wants and satisfy desires" (p.907). Mirrored from the lens of William's (1977) approach of socially grounded etymology, we put it in its historical perspective recalling that before it became a science, and before it served as the intellectual description for a system of production, distribution, and exchange, political economy meant the social custom, practice, and knowledge about how to manage, first, the household, and later, the wider community. The concept of political economy "[…] encompasses studies of production, circulation, accumulation and consumption of goods, services, and value" (Preucel and Hodder, 2004: 99). Two main strands in the concept are usually identified, the world-

systems theory[20] and the theory of underdevelopment[21] which, however, originated in political sociology (Frank, 1967; Wallerstein, 1974, 1980).

Etymologically, the term *political economy* derives from two Greek words *polis*, meaning "city" or "state," and *oikonomos*, meaning "one who manages a household or estate." Premised on this Hebraism, political economy can be understood as the art or study of the management of a country—in the sense of macro or public household—but taking into account political, economic, social, cultural, institutional and other factors that come into play and not forgetting the complex interactions between them.

Part of its evolutionary history is that political economy emerged as a distinct field of study in the mid-18th century, largely as a reaction to mercantilism[22]. It was in this era that the Scottish philosophers Adam Smith (1723-1790) and David Hume (1711-1776) together with the French economist Francois Quesnay (1694-1774) began to approach the study systematically. Unique about their stance on political economy is their secular approach. Refusing to explain the distribution of wealth and power in terms of God's will, they instead appealed to political,

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20 *World-systems theory* was developed by the sociologist Immanuel Wallerstein is an approach to world history and social change suggesting there is a world economic system in which some countries benefit while others are exploited. It shares some things in common with the theory of dependent development. In its characteristic features, world systems theory operates on a five-step principles: 1) that there is a three-level hierarchy consisting of core, periphery, and semi-periphery areas; 2) the core countries dominate and exploit the periphery countries for labor and raw materials; 3) the peripheral countries are dependent on core countries for capital; 4) the semi-peripheral countries share characteristics of both core and peripheral countries; and 5) it therefore stresses the social structure of global inequality.

21 *Theory of underdevelopment* is usually defined from the economist's point of view and so refers to situations when resources are not used to their full socio-economic potential, with the result that local or regional development is slower in most cases that it should be. Furthermore, it results from complex interplay of internal and external factors that allow less developed countries only a lop-sided development progression. Underdeveloped countries are characterized by a wide disparity between their rich and poor populations, an unhealthy balance of trade, and above all, by lack of good hard and soft infrastructure facilities.

22 As an economic theory and practice that was dominant in modernized parts of Europe during the 16th to the 18th century, mercantilism promoted governmental regulation of a nation's economy for the purpose of augmenting state power at the expense of rival national powers.

economic, technological, natural, and social factors and the complex interactions between them in accounting for social issues. Laid out more in his epochal publication of *Wealth of Nations* (1776), Adam Smith provides the first comprehensive system of what political economy stands for in scope and practice. This new response was greatly influenced by the individualist approaches of the English political philosophers Thomas Hobbes (1558-1679) and John Locke (1632-1704), the *Realpolitik* of the Italian theorist Niccolo Machiavelli (1469-1527), and the inductive method of scientific reasoning invented by the English philosopher Francis Bacon (1561-1626).

This uprising movement against the mercantilist spirit of the 18th century attracted sharp opposition from many political economists. This is perhaps best illustrated by Smith's famous notion of the "invisible hand" according to which state policies were often less effective in advancing social welfare than were the self-interested acts of individuals. Individuals tend to advance only their own welfare, Smith argues, but in so doing they also advance the interests of society as if they were guided by an invisible hand. With arguments such as this, individual-centered analysis and policies gained traction to counter mercantilists' state-centered theories.

What is of utmost importance for our purposes here is that political economy, at least of Smith's era, recognizes and emphasizes political, economic, technological, natural, social, and we might add, cultural and institutional factors and the complex interactions between them in any given society. It is in the bid to find out how these factors—individually and collectively—impact agricultural development in rural parts of SSA that political economy was adopted as the appropriate model of analysis for the central focus of this study. Thus political economy is applied here as the study of the social relations, particularly the power relations, that mutually constitute and impact the production, distribution and consumption of resources in agricultural development.

Of very striking importance in this chapter is our aim centered on generating empirical data that hopefully lead to generalizable and replicable conclusions over and above the often too economistic, non-empirical statistical earmarks and categories easily used in academic scholarship on topics that relate to the social phenomena we explore in this study. In doing this we bear in mind that this study was carried out by an anthropologist; as such the techniques which anthropologists use in the field of ethnography were also applied.

2.5 *Conclusion: Chapter Summations*

1) Over and above the historical backdrop of agricultural development in SSA briefly reviewed in the first chapter—with the bewildering wonder it arouses as to why it should have failed or never got started—the need arose for doing something in response to the situation.

2) All the easily cited statistical notations usually generated by the departments of United Nations or its affiliates, revolving around the situation of food crisis in the world especially in SSA with the many earmarks of poverty and food insecurity attached to it, there is still need, an urgent one at that, to do something in response.

3) This felt sense of urgency—to do something personal—eventuated in this case study which was undertaken and carried out here, but from the perspective of applied anthropology.

4) This study was carried out under the ideological assumption and posture that agricultural development—like all other human-social activities—occurs in a multistranded situatedness the understanding of which is necessary for understanding agricultural development in SSA.

5) If the occurrence of agricultural development is situated, then, there is the corresponding need to study and understand the sociopolitical and other factors impacting its performance in SSA.

6) Anchored on this assumption, we came up with the topic under which the case study was carried out, namely, *The Political Economy of Agricultural Development in Sub-Saharan Africa*.

7) To guide the study under this topic we generated some 4 closely linked pioneering questions.

8) The study questions are in turn tested by a group of some data collection techniques including unstructured and structured interviewing; probing for histories and genealogies; participant observation; and other supportive, ancillary tools of photo and video clips and fieldnotes.

9) The data collection and analyses were in turn guided by the disposition of *political economy* as the theoretical framework under which the case study was carried out.

10) A major aim of this chapter is to go beyond the use of everybody's statistical notations that are often not from empirical evidence; as such we conduct ourselves in the spirit of anthropology in raising and applying data based on field research.

SECTION TWO: UNDERSTANDING *UKUM* IN LIGHT OF AGRICULTURE

Chapter 3: Ukum and Tivland as a People: A Short History

3.1 *Chapter Overview*

In this chapter the study sets out to examine issues surrounding the history, historical development and migration of the initial Tiv population found in Nigeria. Grappling with this piece of dicey and slippery investigation leads to the nexus of the contentious European contact with, and penetration of, Tivland on the one hand, and how that contact has become a beacon of reference in attempting the history of Ukum-Tivland. Of greater importance to the study is our desire to understand how the galloping migratory movement of the nascent Tiv group branched into many dozen agnatic segmented settlements usually accounted for by the fact of an original conflict it experienced due to population growth, a corresponding pressure on land and the competition over land-related resources it engendered. The study seeks in-depth understanding of the connection between this and later stages of the people's life, but more so as a population so adept in farming in order, above all, to see how this explains—even if partly—some issues that impact agricultural development in rural Nigeria as in other rural parts of SSA in present times.

3.2 *Challenges to Historicizing Ukum and Tivland*

Attempting a comprehensive history of Ukum in particular and of Tivland as a whole faces a major challenge. This results from three or more interlaced facts including, lack of adequate, original, fact-based history of Tivland part of which Ukum is; major discrepancies within the corpus of 'histories' advanced by scholars who have attempted it (Aondohemba, 2014:13-14); the third hitch comes from the situation, as Downes (1933:1) puts it, that even when scholars attempt histories of Tivland they face the problem of the "paucity of the tradition of origin." In that case, therefore, the documentation attempted here is based more on what was gathered from aged field

informants in addition to often conflictual stories gleaned from this tradition, and excerpts from a few available literature on origins to build the brief "history" of Tivland as is represent here.

However, bearing in mind that we are not writing a comprehensive history of either Ukum or Tivland but rather a representation only of what is deemed necessary for this study, we delineate our focus on what matters for our purposes. We hypothetically state that whatever could be said of Tivland in general—on historical and other issues—also apply in some cases to its parts, implying at the same time that there are historical and other facts that are peculiar to Ukumland.

3.3 *A History of Tivland* (?)

Stories on the origin of Tiv strike intriguing notes. For example, one tradition of origin, which does not link the origins of Tiv to a divinity aligns it with some biblical parallels (Aondohemba, 2014:1). According to this account, there was a certain Shon who had two sons, Ornyan and Orii. Orii was his favorite who also exercised the singular responsibility of providing firewood to keep Shon warm. Having fallen into dotage made further worse by blindness, Shon summoned Orii one day intent on invoking blessings upon him not realizing that at some point Orii had quietly left to provide firewood and, Ornyian, who had been lurking around and listening the conversation cashed in upon the chasm. Shon inadvertently conferred on Ornyian the blessing of the knowledge of technology he had meant for Orii. Upon his return and realizing that their father, Shon, had given to Ornyan the blessing he meant for him, he later received from Shon the blessing of the knowledge of farming. Therefore, the story concludes, the Tiv who are said to have descended from Orii acquired the knowledge of farming.

Another tradition of Tiv origin introduces yet another personage, namely, Takuruku, who is revered as the ancestor (father). This mythical primogenitor, according to Wegh and Moti (2001:9-12), also had two sons: Tiv and Uke. "That means that the Tiv are descended from Tiv,

while other peoples of the world are descended from Uke," writes Aondohemba (2014:12). A prong of this version of Tiv tradition of origin states that Tiv in turn had two sons named Ichongo (the circumcised) and Ipusu (the uncircumcised). After Tiv acquired the rite of circumcision from foreigners since, it is claimed, he did not know about it before, he circumcised one of his sons whom he *ipso facto* named Ichongo. Thus circumcision as a rite of initiation into adulthood became part of Tiv life as a matter of tradition to end the period of male childhood. The Tiv, this story concludes, are descended from the two sons of Tiv—Ichongo and Ipusu—with the difference lying in lineage agnatic segmentations. These points seem to agree Aondohemba's (2014:13) stance:

> It is generally accepted that the account of Tiv genealogy tallies with Tiv social organization. Political and governmental organizations also reflect the Ichongo/Ipusu segmental opposition. Generally, political appointments are equitably distributed between the two. The office of the Tor Tiv (Tiv paramount ruler) is alternated between Ichongo and Ipusu who enjoy equal status.

We shall see more of this under the section on political structure in Tiv social organization (chapter 5).

3.4 *Tiv Migration*

The history of Tiv migration seems to be as contentious as it is ambivalent; this is not surprising considering the fact that there is so much cloud of uncertainty and disagreement on the history of the origin as a people. For, while there is agreement among writers, that the Tiv is certainly a Bantu tribe, there is, however, disagreement as to whether the Tiv is a main Bantu or semi-Bantu population. While Isichei (1983:9) classifies the Tiv as a semi-Bantu group, Abraham (1940:4-7) argues that they are a main Bantu group offering as a justification very close similarities in the grammatical and vocabulary features of the Tiv and the main Bantu languages.

There are two identifiable accounts which, while agreeing that the Tiv who inhabit the central part of Nigeria migrated from some place to where they now occupy, however disagree on the take-off point of that migration. The dominant account is that which runs in the accounts of writers on the Tiv and among some indigenous Tiv writers themselves all of which claim that the

Tiv originated from a hilly place popularly known as Swem. Representative of non-Tiv voices on this dominant account is Atel (2004:9) and Bohannan (1953:) who suggest the possibility of this being the highlands of Ngol Kedju in the North Western Cameroon where linguistic and cultural elements similar to the Tiv are identified. Sai (1939:216)—being the first and original Tiv indigene to attempt a comprehensive history of his people (Bergsma, 2015:611)—"seems to place Swem in some part of the south-east of Tiv land among the Ukwese and Undir bush tribes" (Aondohemba, 2014:14). Notwithstanding the disagreements as to the location of Swem, one thing is commonly accepted among all those who have attempted the history of Tiv migration: Swem is the place of Tiv origin. It is the view of Wegh (2003:24) that Swem occupies prominence in Tiv culture and history because, according to him, the Tiv spent much time wandering in search of a place to call home, they finally settled there for a long time; thus "Swem became for the Tiv a sacred and unique place and they saw it as 'symbol of the totality of Tiv society and culture in all its sacredness'" (Aondohemba: 2014:14-15).

On the other hand, another group of historians on Tiv migration dismisses the account of Swem being the place of Tiv origin. Prominent among this less dominant school of thought is Abraham (1940:7) according to whom the Tiv originated from the Congo in Central Africa. Once again, Abraham's argument is based on analysis of Tiv language which, according to him, reveals similarities between the vocabularies of the Tiv of Nigeria and those of the Nyanza group of Bantu languages in East Africa who are as well claimed to have originated from the Congo. Abraham's account is adopted by Gbor (1978:9-12), Utov and Ioratim-Uba (1998:9-10)—indigenous Tiv historians—who follow this track of linguistic analysis. Arguing that Swem on the highlands of Cameroon is not the place of Tiv origin, Gbor opines instead that the migrant Tiv, while coming

from their original home in the Congo only passed through Swem where they settled for a while, but not stating how long, before they finally arrived at their present home in Nigeria's Middle Belt.

The foregoing hairsplitting contention as to Tiv migration take-off point seems to be the headache of professional scholars. For, outside the thorny contentions among academics, the unmistakable *historical* account of Tiv origins as is tenaciously held by traditional historians is that, their great, great grandfathers had migrated from the south-east to the place now called Tivland in the central part of Nigeria. This seems why Tiv description of their migration from the south-east and final settlement where they now occupy lacks both precision and clarity except, as Bohannan (1953:12) comments, that this meant "they were "coming down" (*sen*, that is, going north-west)". According to an aged oral historian of the Biam District of Zaki-Biam in Ukumland, nobody alive today can recall when all this took place. In the absence of any substantiable facts, our informant resorts to stories and myths to make a case for the veracity of his account of the origin of Ukum and Tivland (Fieldnotes: August 20, 2012). As one of the earliest writers on Tiv history, Downes' (1933) documentation seems confirmatory of this point on the loss of memory as is claimed by our indigenous oral historian.

> The history of the Tiv peoples, prior to their advent into the country which the tribe now occupies, appears to be almost completely erased from living memory, so that we can find few allusions in folk stories, myths and songs, which convey any clues to the more remote history, real or mythological, of the tribe (Downes (1933:1).

The extent to which one can attempt or, in fact, deny the *history*[23] of the history of the Tiv migration as a people—based on what was gathered from the field and from earlier writers —

23 We refuse to join or patronize any schools of thought that in any way deny history to any populations based on the claim that they do not have written records. There is more to history, we prefer to argue, than written records. After all, it is the case that across the world, people have always had some kind of folk tales and traditions of origin that are either true, putative, or even fictive through which they lay some legitimizing claim to their origin. After all, archaeological facts are very solid symbols of history used in accounting for the migratory pathways of peoples across the globe and of all times. Furthermore, even the

remains a matter of serious debate. This is more so when we consider the pivotally important place of oral tradition in the archaeology of peoples all over the globe. We distance ourselves from such thorny debates here since our focus is on food production in rural Nigeria using Ukum in Benue State as a case study site.

3.5 *Tiv Migration and Disintegration in Relation to Agricultural Production*

From the foregoing, one major point is particularly noteworthy, namely, that the Tiv of Nigeria are a people whose life has been characteristically marked by migration. What matters to us in the collection of very similar stories presented by our oral historians is that, when their forefathers set out on this journey, "they lived in a single large community on top of a hill which they locate to the south-east" (Bohannan, 1953:12)—regardless of which hill it might be as there are disputes precisely as to which it is. This is made more controversial by the fact of who tells the story and from which part of Tivland he/she hails.

The second major point of agreement in these stories is that over time, this primordial Tiv "single large community" began to 'disintegrate' into and dispersed in different directions.

arrogance and claim to originality and authenticity made by written documents and their authors in one or another had to consult oral traditions in composing that which finally presents itself as "history" in the diachronic sense of the term. A typical example here is the corpus of the books and letters that made their way into the New Testament (NT) Scriptures. From the point of view of exegesis and of "history" the NT depended very heavily on oral tradition which was the only store house and archive the early Church had before any books/letters were composed and given the stamp and authorship of the Holy Spirit and hence incorporated into the canonicity of the Bible. Again, anthropologists have, over time, composed histories of peoples all over the world but not without digging into the memories of the indigenes for the "facts" they factored into their monographs as the peoples' histories. If anything, therefore, it is that there would be nothing like history without that which exists and floats authoritatively as oral tradition. More seriously, we would like to further argue and conclude this caveat by observing that, as a matter of fact, it is that which exists as oral tradition that makes that which claims to be *history* jump into reality and meaning and that which finally becomes a ready-at-hand document to be consulted but not without always appealing to its primeval source.

Population growth[24] (and the usual attendant pressure it brings on land) was always the explanatory paradigm of our narrators and occupies prominence especially in the stories of our Ukum aged informants. According to them, when the population of this nascent group grew it led to competition over land and its correlated resources; as a result the group broke down and migrated in different directions. The present-day experience of incessant intra-ethnic conflicts—almost always over land and the enduring disaffections it creates—is readily used to explain the original conflict which led to the division and dispersion into different settlements of the primordial Tiv group[25]. This is buttressed by the fact of the many genealogical tributaries of ancestral linkages through which Tiv divisions trace their agnatic origins to a common Tiv primogenitor. Figure 3.1 (below) mirrors the many genealogical groups the Original Tiv Group branched into after the first conflict-induced fission occurred. In real life, however, each of these has branched out into uneven smaller groups which Tiv indigenes designate as lineages, villages, compounds and kindreds determined by variations in size but all connected to the one ancient, primeval primogenitor, Tiv.

24 All through this work we will continue to come across references to "population growth" or population explosion, as some writers would prefer to call it, but always in the context of illustrating how growth in the numbers of people inhabiting a particular, specific area of land has remained a cause for struggles and sometimes violent conflicts that sometimes eventuate in fission, migration, and the founding of new consanguineal relatives that are, however, still in touch with and lay claim to property held and shared in common by the one single group before the population growth induced feud split it into smaller groups and settlements. To a large extent we shall see how this phenomenon ends up as one of the factors impacting agricultural development in SSA—the reason for this inclusion in the first place.

25 That struggle over land (and its related resources) has almost always led to division among groups that initially knew no divisions has been richly documented by many anthropologists as is exemplified in the account of Forde (1964) among the Yako of Cross River State, Nigeria. This is also a typical experience in Ukum and all Tivland.

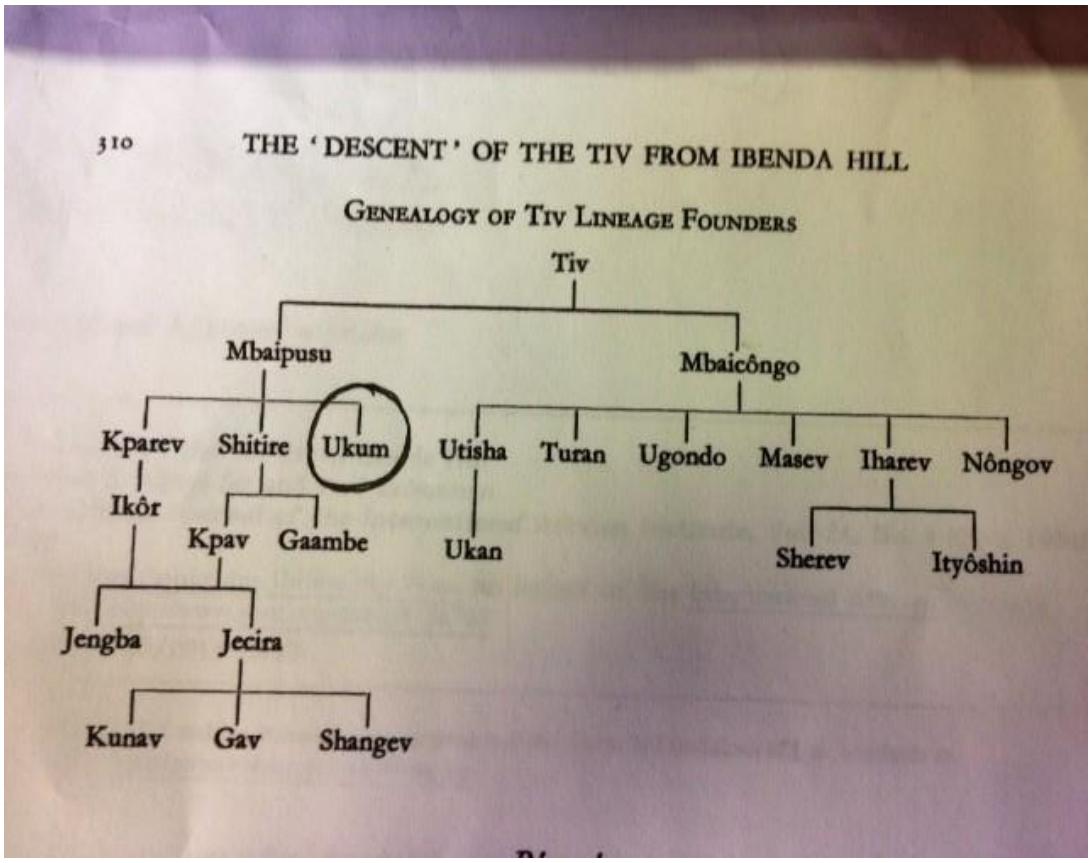

Figure 3.1: ***Genealogically Differentiated Agnatic Groups of the Original Tiv Group***

What matters to us as far as this sketchy attempt at the history of Ukum and Tivland is concerned is its connection to the fact of what they are generally known for, namely, a people adept in agricultural production as their way of being in the world. According to one informant (Fieldnotes: August 19, 2012), the fact that Ukum is deeply and vastly agrarian is traceable to their Tiv forefathers. According to him, their ancient ancestors survived by cultivating the patches of land on which they found themselves before and after their division into different settlements. In order to conquer their environment, they invented hoes from woods in their immediate environment; with this instrument they tilled the earth for their survival (Fieldnotes: August 29, 2012; September 21, 2013) till much later when they made their first encounter with metal and so transitioned from foragers to rudimentary pastoralists. Downes (1933:3) confirms this:

> At this period in the history of the tribe, the Tiv were probably just emerging from the state

> which may be described as that of "food gatherers-and-hunters", to an agricultural one. They are said to have farmed a little in terraces on the hills, using a wooden hoe called "ikpe", and growing the small variety of yam called "imondo" and millet called "agase"

As the account of Hunter and Whitten (1976) goes, peoples all over the world passed through this inchoate stages of subsistence before the invention of and transition into the domestication of plants and animals called agriculture. The broad-spectrum subsistence strategies people practiced persisted until the invention of agriculture.

> Agriculture was invented at least three times in three different areas of the world: the Middle East, East Asia, and the New World. In each case we can identify a geographic center where entire complexes of plants and animals were domesticated and from which they diffused outward as a group. We can also identify noncenters, broad regions where different plants and animals were each domesticated separately and from which they diffused individually throughout the entire region. Systematic communications probably existed between each center and its associated noncenter area (Hunter and Whitten, 1976:232; see also Harlan, 1971)

Kent Flannery (1969:57) renders a corroborating account that illustrates how more complex forms of subsistence developed over time from foraging on the one hand, and how this was accompanied by change from a narrow range to a broader spectrum of food resources on the other—apparently with advancement in the techniques used and as was occasioned by necessity and growth in populations (Hunter and Whitten, 1976:231, 238).

3.6 *Ukum-Tivland Encounter with British Colonialization*

According to some Ukum elders, colonial administrators entered Tivland only in 1911. As an elderly informant of Ayaba village in Mbaterem district of Ukum put it, the first Whiteman who came arrived at Shitile[26] (Fieldnotes: September 16, 2013). This is contrary to the records found in some written accounts to the effect that "[…] the earliest recorded contact between Europeans

26 *Shitile* is one of the major districts in Katsina-Ala LGA from which Ukum LGA was carved out; the two groups have been known to be in constant disagreement—almost always around territoriality (and sometimes about claim to cultural and ethnic superiority by the former). The mention of the name Shittire among Ukum people does not arouse a good feeling, to say the least; we assume it is the same with Shittire when the name Ukum comes among them.

and the Tiv in their own country concerns 1852, when the Baikie expedition found Tiv along the south bank of the Benue" (Bohannan, 1953:13). The Tiv were known for their fearsome, brave and resistant character in the face of invasions. It is reported that they were the last of all the tribes in the Niger River area to surrender to British penetration and control (Bohannan, 1953:13). This is further corroborated by an earlier Annual Report of Northern Nigeria by Lord Lugard[27] in which it is claimed that the *Munshi*, that is, the Tiv, had stalled the colonial effort to set up a telegraph line from Lokoja[28] to Ibi[29] which led the administration to carry the line off to the far north in order to avoid the Tiv country. Only after the militancy of Britain had finally fallen into embrace with Tivland did the picture represented of them as "savage lot of cannibals" give way to a rational and more humane description which views them as "cheerful and fiercely independent peasants" (Bohannan, 1953:13).

That Britain finally penetrated Tivland was a child of circumstance in which the British colonial powers played the opportunist. This occurred in the conflict which broke out in early 1906 between the Hausa and Jukun traders at Abinsi—a popular riverine Jukun settlement on the banks

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27 *Lord Lugard* was the former British colonial governor-general of Nigeria. In 1926 Lugard wrote his unfiltered thought about the people from the geopolitical regions Britain would amalgamated in 1914 and called Nigerians. From his book, *The Dual Mandates* (1922), comes these excerpts: "In character and temperament, the typical African of this race-type is a happy, thriftless, excitable person, lacking in self-control, discipline, and foresight. Naturally courageous, and naturally courteous and polite, full of personal vanity, with little sense of veracity, fond of music and loving weapons as an oriental loves jewellery. His thoughts are concentrated on the events and feelings of the moment, and he suffers little from apprehension for the future of grief for the past. His mind is far nearer to the animal world than that of the European and Asiatic, and exhibits something of the animals' placidity and want of desire to rise beyond the state he has reached" (Accessed on April 7, 2016).

28 *Lokoja* is a town known in Nigeria as where the two major Rivers, Niger and Benue, meet and form a confluence. As such, Lokoja is usually called the town of confluence and has accordingly become one of the easy articles in Nigeria's physical geography.

29 *Ibi* is one of the major cities in Taraba State in lower part of Northern Nigeria and shares proximity with Tivland. Among other things Ibi is known for massive production of agricultural goods including groundnuts, yams, maize, and others. Fish is caught in great commercial quantities at the Ibi river which is a tributary of the Benue River. Fish from Ibi has ready market at Zaki-Biam and all other major markets in Nigeria and beyond.

of River Benue. The Jukun solicited for Tiv help against the Hausa in that fight in which as many as 76 Hausa were killed while 163 were missing most of whom were reported to have been taken into slavery by the Tiv. The story runs further that Tiv razed down a canteen belonging to the Niger Company[30]. With this development, Lord Lugard sent an envoy of his military to whose force the Tiv offered but little resistance in the release of the 118 Hausa they held captive in the Jukun-Hausa feud, which was Lugard's purpose for sending his troops. The abrupt manner with which Lugard's troops were withdrawn has remained a garland of self-arrogated pride of our Tiv oral informants even of the recent times of this study. For, as Bohannan (1953) observes, "Even today, Tiv claim that they drove this force back and that they were not conquered by the Europeans but invited them in to settle disputes" (p.13).

Some critical redaction of the "facts" submitted by our informants juxtaposed with those from written documents seem to suggest that European penetration of Tivland began in the areas that share close borders with Ibi and Wukari[31] in the present-day Taraba State of Nigeria. This is so because the referenced Hausa-Jukun Abinsi crisis made way for and facilitated European plan for a peaceful penetration into the Tiv country, which was embarked upon in 1907—advancing in from Ibi and Wukari to as far as Katsina-Ala. This means that the British first penetrated the area

30 Originally called the ***Royal Niger Company***, it was a mercantile company chartered by the British colonial government in the 19th century. First formed in 1879 as the ***United African Company*** (UAC) and later renamed the ***National African Company*** (NAC) in 1881 and to the ***Royal Niger Company*** (RNC) in 1886, the company was conceived and existed for the purpose of being an instrument in the formation of Colonial Nigeria, but more so to enable the British in their war of political control and economic extraction competition against Germany in the 1890s. In 1900, the areas controlled by the company became the corner-stone of Southern Nigeria Protectorate, which was in turn merged with the Northern Protectorate to expand the fronts of the Colonial Empire called the Protectorate of the Nigeria in 1914, which eventually gained independence with the same borders as the Federal Republic of Nigeria in 1960.

31 Wukari is a popular administrative and commercial headquarters of Taraba State and shares contiguous proximity with Tivland in the Ukum areas which explains also why the two ethnic groups are always in conflict.

understandably described as the *Jukunized*[32] parts of Tivland before they gained access into the Southern parts. Up to this time it was still part of Southern Nigeria, which it remained till the break of World War I in 1914.

Our inference here is that this could be the echoes of history the earlier referenced elderly informant meant when he claimed that he witnessed the entry into Tivland of the first white men in 1911. This interpretation seems to be the case with the witness of Bohannan (1953) that, "Southern Tivland was first patrolled in 1911 and 1912" (p.14).

3.7 *On the History of Ukum Specifically*

Foregrounded in this rather sketchy and general history of Tivland, we now point out the parts of Tiv history that are specifically peculiar to Ukumland. This becomes more pertinent as it is usually claimed that Ukum happens to have been one of the earliest agnatic groups to move away from the hills in its association with the *iHarev* and *iMasev* "said to have been the first Tiv clans to leave the hills" in a north westerly direction "owing to economic pressure caused by the rapid increase in numbers and the development of the agricultural instinct"[33] (Downes, 1933:4). Much later the anthropological account of Bohannan (1968) corroborates the claim that population growth and the pressure it exerts on land resources has remained a reason for fission among the Tiv. According to him, land cases, especially "boundary disputes," are some of the reasons the Tiv

32 Those referred to as J*ukunized* parts of Tivland are those parts that share close borders with the Jukun ethnic populations of Taraba State on the one hand, and those Tiv areas that have been influenced via social intercourse of all types by the Jukuns on the other. Some parts of Ukum fall into this category of Tivland said to be *Jukunized*.

33 We shall later see how this constantly factors into the accounts as to why there is incessant land boundary-related intra-and inter-ethnic conflicts in relation to the Tiv on the one hand, and on the other, how the factor of population growth in rural parts of SSA has itself become a snag in the wheels of agricultural development in the region.

dispute among themselves and call a *Jir*—the court—inviting their *Mbatarev* (respected elders) for arbitration (Bohannan, 1968:109).

It is also claimed that the Ukum clan in their movement tended westward and followed the Katsina-Ala river (a major branch of the Benue River) settling a while at the *Mkar* hill from where they proceeded by stages yet steadily before finally settling where the clan is now. This claim gathers more credence with the proximity of Ukum to the Jukun and Shitile populations with whom they have constantly stayed in lasting conflict in their history (Aluaigba, 2001; Egwu, 2004; 1998; IRIN, 2001; Shut, 2007). According to Downes (1933:6), they arrived here as early as 1885.

Further evidence on the claim to the Ukum settlement in this part of Tivland comes from the fact of the very similar patterns of doing things in social life between the Jukun and Ukum; some traditions argue, however, that Ukum could have gathered them from association with other ethnic groups other the Jukun. This is regardless also of the Tiv tradition which, according to Downes (1933:8), claims that "they never came into contact with the Jukun before coming down from the hills." The extent to which this claim holds the sway of veracity is doubtful considering the fact, as Downes (1933) adds, that the cessation of the slave trade having been overtaken by trade in palm oil in the latter part of the 18th century (Forde, 1964) gives even if part explanation as to why the Tiv came down from the mountain, and makes a case that the Jukun carried the slave raids into the Tiv territories (Downes, 1933:8). However, it is noteworthy that there are cultural and or religious elements that were not original to Ukum but are to the Jukun, which have all the same become part of the life of the former. According to Downes (1933:6), it is stated that the Ukum-Tiv method of war was a Jukun influence. This is the point Downes (1933) strives to underscore in the following passage.

> The Shitile, Ukum, and other clans attacked their neighbours constantly and this may have been, in a measure, due to Jukun influence, for the object of these attacks and raids was the capture of

> slaves. Superficial influence of the Jukuns is now observed among those Tiv peoples nearest to Wukari and other Jukun settlements, i.e. Ukum, Shitile, Nongov and Tombo: further away it seems to be imitative of these clans who were awed by the magical powers of the Jukun hierarchy. Katsina-Ala was one of those Jukun religious outposts which appear to have been a part of the Jukun policy of peaceful penetration

It is also postulated that in addition to the Tiv having acquired their maize from the Jukun, they also—directly or indirectly—acquired from the Jukun their practice of *akombo* as "impersonal forces to be feared" (Aondohemba, 2014:39). For Bohannan (1953:85-6), *akombo*

> […] are magical emblems and magical forces […] composed of plants, stones, celts, corn cobs, sometimes carvings and pots. *Akombo* are non-human forces, established by the Heavens at creation and thus part of the original environment in which Tiv found themselves.

Geopolitically, the present-day Ukum division was formerly under the Katsina-Ala LGA. During the President Shehu Shagari military administration (1979-1983) this region was carved out and granted its own exclusive political identity in 1981, hence Ukum LGA. Unfortunately, General Mohammadu Buhari military administration scrapped it out in 1984. As it is presently constituted, the Ukum LGA was created or re-instated in September of 1991 by the military administration of General Ibrahim Babangida.

3.8 *Conclusion: Chapter Summations*

From the foregoing, we have abstracted the following chapter lead-points including:1) The Tiv population migrated from a geographical area of Africa (Sudan) described as the south-east and settled where they now occupy called Tivland in Central Nigeria.

2) That primordial small group grew over time and disintegrated into smaller agnatic groups due to growth in population and its corresponding pressure on land and its related resources.

3) This first act of disintegration was not a peaceful multiple migration but one that resulted from conflict-related struggle over the patches of land at the disposal of the original Tiv group.

4) This initial and pioneering mother-conflict among the Tiv is associated with the transition from foraging to the development of the agricultural instinct which necessarily required land.

5) It is further claimed that this is how Ukum and all Tiv became deeply immersed in farming.

6) This original conflict among the first Tiv group has become a ready-at-hand explanatory paradigm for subsequent conflicts within and around Tiv communities—almost always land.

7) Writing a comprehensive history of the Tiv is beset with many pitfalls especially lack of *facts*.

8) However, European contact with Ukum-Tivland provides some *historical* starting point.

9) In terms of acquiring political identity, Ukum has undergone some chequeered history till it gained its exclusive sense of peoplehood in 1991 as it is today.

Chapter 4: Location, Geography, Demographics and General Features of Ukumland

4.1 *Chapter Overview*

This chapter brings us to a wide range of areas to be examined as we track the factors impacting agricultural development in SSA. In this chapter we locate Ukumland in Benue State and in Nigeria and so gaze into the demographic and natural information of the place. We place emphasis on the demographic and natural dispositions of Ukumland in order to see how these prepare the place as other parts of Nigeria and, by extension, SSA on the one hand, and how the same facts bring us to the knowledge of why and how rural SSA communities make a living out of their environment. In this way we focus not only on agricultural production but on other related economic activities the doing of which creates the landscape of people-environment, ecosystemic relationships from within, and how this in close relationship with the fact of contiguous proximity[34] and geographical sociology[35] make for social and economic relations between Ukum and its neighbors and with the outer world of SSA. We try to go beyond these levels and seek a more complete picture created by these same complex landscapes and try to understand how the same ethnic populations that mix well in these areas fall into often protracted violent conflicts that disrupt the same activities especially agricultural production and trading that hold them together.

4.2 *Location of Benue State and of Ukum LGA in Nigeria*

34 We pull in the fact of "contiguous proximity" at this point in order to indicate the fact of physical closeness or nearness by the sheer fact of sharing common borders. The compound term, therefore, means touching upon each other by virtue of being adjacent to one another. We shall see later how it fosters conflict and interchange of values and above all trade and all other forms of inter-ethnic intercourse.

35 By this is meant the sociological facts thanks to geographical facts and dispositions of a place. Geographical sociological differences about places that are even are close and contiguous to each other help in making the differences that reflect in such aspects of life like specialization and the kinds of goods and services the groups produce and circulate usually through trade and other forms of social intercourse.

From the map (Figure 4.1), Benue State is located in the area called the "Middle Belt" (Akpede, 2010:1). Ukumland where this study occurred is part of Benue State (Figure 4.2).

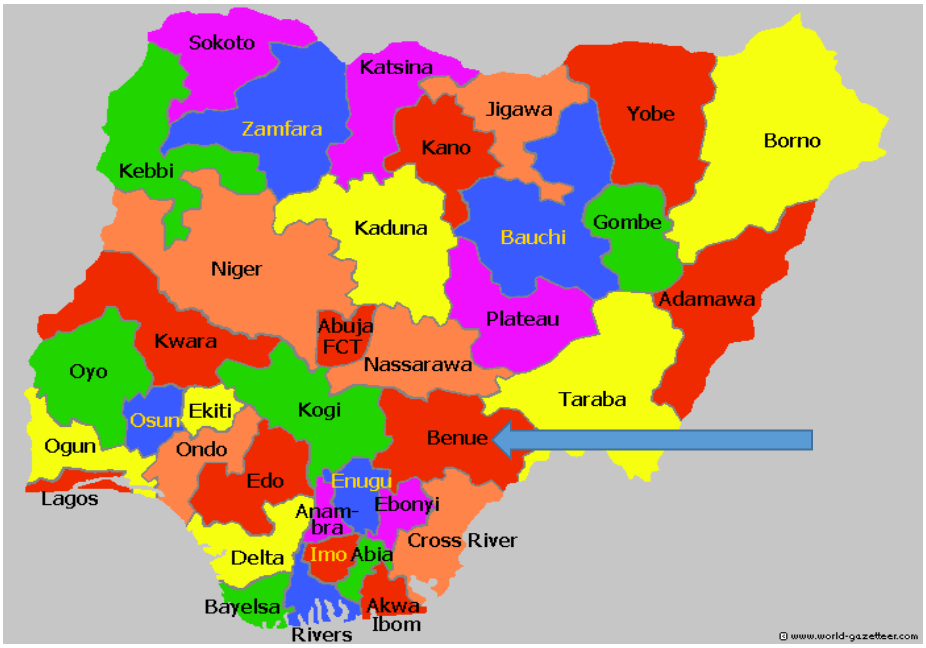

Figure 4.1: *Map of Nigeria showing the Site for this Study*. (Key ⟵)

Originally this part of the country was an integral part of the Northern Protectorate. As a result of undying agitative pressure for the balkanization of the large area twelve States were created in 1967 out of the one Northern Protectorate one of which being the former Benue-Plateau State. The fact that this new creation left the people of Benue still engrafted on Benue-Plateau which kept them together with the Northern Region whereas they wanted autonomy from it, the agitation continued. On February 3rd 1967, however, their quest resulted in the creation of Benue State. At this point in the evolution of the State, the Igala and Bassa populations were pulled over from Kwara State and made part of Benue State. However, the desire of the Igala populations to rejoin their ethnic kith and kin made for the creation of Kogi State in 1991. This leaves Benue State with the geopolitical boundaries as it is today and as is shown in the map (2) below.

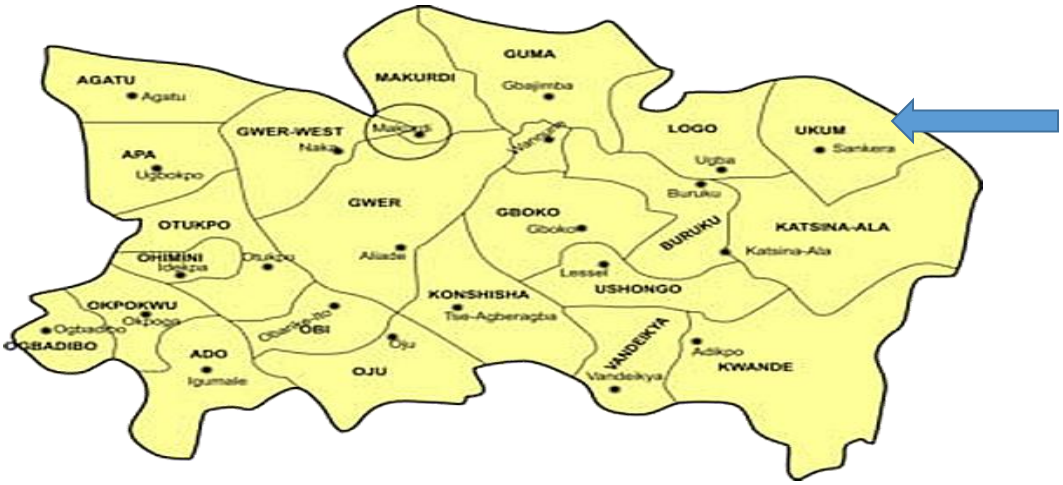

Figure 4.2: *Map of Benue State indicating its 23 Local Government Areas (LGAs)*. Key

As our map (Figure 4.1) of Nigeria details, Benue State shares boundaries with Enugu State in its Southwest area; in the South Benue is bordered by Ebonyin and Cross River States; Kogi State occupies Benue's Western borders; Nassarawa and Taraba States bound it in the North and Southeast respectively. Cameroon[36] is also a neighbor to Benue State touching it at the point it empties its River Benue waters into the South Atlantic Ocean. As the account of Sai (1939:13) holds, the area covered by Tiv in the Middle Belt region is the "pleasant savanna country to the south of the River Benue and a narrow strip along its north bank."

4.3 *Geographic and Demographic Features of Benue State*

Benue State lies latitude 7°20' north and longitude 8°45' east. The northern parts are of grass savannah whereas the south is wooded savannah. On account of this natural disposition rich and diverse agricultural crops are cultivated including rice, yams, beans, cassava, potatoes, maize, soya bean, sorghum, millet, coco-yams among others are grown. The State is popularly referred to

36 Let us recall that this geographical proximity in addition to linguistic and cultural similarities constitute a strong reason non-Tiv scholars like Atel (2004:9) and Bohannan (1953:) suggest the possibility of the Tiv having migrated from the highlands of Ngol Kedju in the North Western Cameroon[36] before their final settlement where they now live (see sub-chapter 3.4; page 43).

as "food basket of the nation" with agriculture being its main economic activity (Gbenda, 2012). It accounts for over 70 percent of Nigeria's soya bean production. Fishing in inland waterways and animal husbandry are its other commercial activities. Its major minerals include limestone, gypsum, kaolin, lead, zinc, anhydride, coal, calcite, gemstones and magnetite. Breweries and cement plants are its major industries.

Comprising of twenty three (23) LGAs, Benue State covers an area of 3,080,000 hectares of 30,800 square kilometers as is shown in the table (4.1) below.

Table 4.1: *Nigerian States indicating Land Area in Miles and Kilometers, Hectares and Acres.*

States	Hectares	Square-Kms	Acres	Square-Mls
Abia	490,000	4,900	1,205,400	1,914.06
Adamawa	3,870,000	38,700	9,520,200	15,117.19
Akwa Ibom	690,000	6,900	1,697,400	2,695.31
Anambra	486,500	4,865	1,196,790	1,900.39
Bauchi	4,911,900	49,119	12,083,274	19,187.11
Bayelsa	905,900	9,059	2,228,514	3,538.67
Benue	***3,080,000***	***30,800***	***7,576,800***	***12,031.25***
Borno	7,260,900	72,609	17,861,814	28,362.89
Cross River	2,178,700	21,787	5,359,602	8,510.55
Delta	1,710,800	17,108	4,208,568	6,682.81
Ebonyin	640,000	6,400	1,574,400	2,500.00
Edo	1,918,700	19,187	4,720,002	7,494.92
Ekiti	543,500	5,435	1,337,010	2,123.05
Enugu	753,400	7,534	1,853,364	2,942.97
Gombe	1,710,000	17,100	4,206,600	6,679.69
Imo	528,800	5,288	1,300,848	2,065.63
Jigawa	2,328,700	23,287	5,728,602	9,096.48
Kaduna	4,248,100	42,481	10,450,326	16,594.14
Kano	2,028,000	20,280	4,988,880	7,921.88
Katsina	2,356,100	23,561	5,796,006	9,203.52
Kebbi	3,698,500	36,985	9,098,310	14,447.27
Kogi	2,774,700	27,747	6,825,762	10,838.67
Kwara	3,570,500	35,705	8,783,430	13,947.27
Lagos	367,100	3,671	903,066	1,433.98
Nassarawa	2,873,500	28,735	7,068,810	11,224.61
Niger	6,892,500	68,925	16,955,550	26,923.83
Ogun	1,640,000	16,400	4,034,400	6,406.25
Ondo	1,582,000	15,820	3,891,720	6,179.69
Osun	902,600	9,026	2,220,396	3,525.78

	Oyo	2,650,000	26,500	6,519,000	10,351.56
	Plateau	2,714,700	27,147	6,678,162	10,604.30
	Rivers	1,057,500	10,575	2,601,450	4,130.86
	Sokoto	2,782,500	27,825	6,844,950	10,869.14
	Taraba	5,628,200	56,282	13,845,372	21,985.16
	Yobe	4,660,900	46,609	11,465,814	18,206.64
	Zamfara	3,793,100	37,931	9,331,026	14,816.80
	FCT-Abuja	760,700	7,607	1,871,322	2,971.48
	Total	90,989,000	909,890	223,832,940	355,425.78

Table 4.1: *Area of Nigeria by States* (Source: Nigerian National Bureau of Statistics, 2010).

Placed against other Nigerian States, Benue State has a population of 4,253,641 (2006 census figures) with a population density of 137 people per square kilometers. The State accounts for 2.5 to 3.0 per cent of Nigeria's total population of about 174,507,539, which places the country at the 8th position in world country population ratings (CIA World Factbook, 2014)

4.4 *Basic Demographic Features of Ukumland Specifically*

Going by the 1991 census figures, Ukum LGA has a population of 183, 422 people broken down into 91,456 males and 91,566 females. The 2006 census, however, represents a figure of 216,930 people broken down into 108, 704 females and 108, 226 males; this is regardless of the seeming discrepancy between these figures and those reflected in the table below. However, "Due to immigration factors and increasing birth rate, one can surely say that the current population is presently higher than these census figures" (Profile on Ukum Local Government of Benue State, 2012:2). Following the data in the table (4.2) below, Ukum stands number 8 in terms of the numerical strength differentials among the 23 LGAs of Benue state.

Table 4.2**:** *23 Local Government Areas of Benue State and Population Distribution*

Name	**Status**	**1991 Census**	**2006 Census**
Benue	Local Government Area	2,753,077	4,253,641
Ado	Local Government Area	104,137	184,389
Agatu	Local Government Area	...	115,597

Name	Status	1991 Census	2006 Census
Apa	Local Government Area	...	96,780
Buruku	Local Government Area	130,450	206,215
Gboko	Local Government Area	...	361,325
Guma	Local Government Area	116,336	194,164
Gwer East	Local Government Area	117,630	168,660
Gwer West	Local Government Area	74,588	122,313
Katsina-Ala	Local Government Area	...	225,471
Konshisha	Local Government Area	145,614	226,492
Kwande	Local Government Area	180,327	248,642
Logo	Local Government Area	...	169,570
Makurdi	Local Government Area	239,889	300,377
Obi	Local Government Area	...	98,707
Ogbadibo	Local Government Area	89,497	130,988
Ohimini	Local Government Area	...	70,688
Oju	Local Government Area	...	168,491
Okpokwu	Local Government Area	90,241	175,596
Oturkpo	Local Government Area	...	266,411
Tarka	Local Government Area	...	79,280
Ukum	***Local Government Area***	***167,266***	***216,983***
Ushongo	Local Government Area	123,166	191,935
Vandeikya	Local Government Area	161,863	234,567

Table 4.2: *Benue State Population Statistics: Contents: Subdivision* **(***emphasis mine***)**

4.5 *Some Specific Geographic and General Features of Ukum LGA*

Ukum lies between Latitude 6 degrees and 7 degrees North, and Longitude 9 degrees and 10 degrees South. Ukum region has a land mass of 1,810.99 square kilometers and is located in the Northeast of Makurdi, the State Capital. As is shown in the map (Figure 4.2) above, Sankera is the headquarters of Ukum LGA where this study occurred. Ukumland is located up in the Northeast part of the State. On the South it is bordered by Katsina-Ala from where it was carved out through a forth-and-back chequeered history in the 1990s. It shares borders with Logo LGA on the West; with communities in Nassarawa and Taraba States in the North and Southeast

respectively. The areas of land covered by the Ukum country fall within the generally low-lying and gently undulating land surface. Commenting on this as if on Tivland generally, Bohannan (1968:3) writes:

> The country inhabited by the greater portion of the 800,000 people who call themselves Tiv is an undulating plain sweeping down from the peak of Koloishe, just south of Tiv country, through more than a hundred miles to the broad basin of the Benue: from wooded foothills whose summits exceed 4,000 feet in altitude to the bare flat sandbanks in the river, about 300 feet above sea level.

Like the rest of Benue State and Nigeria, Ukumland has a tropical sub-humid climate split into two distinct seasons, wet and dry: the wet season lasts for seven months starting mainly from April and ends in October with usually one or more out-of-season heavy rains in January, February or March from the East-West line squalls. It is this early rainstorm that enables farmers to hoe their

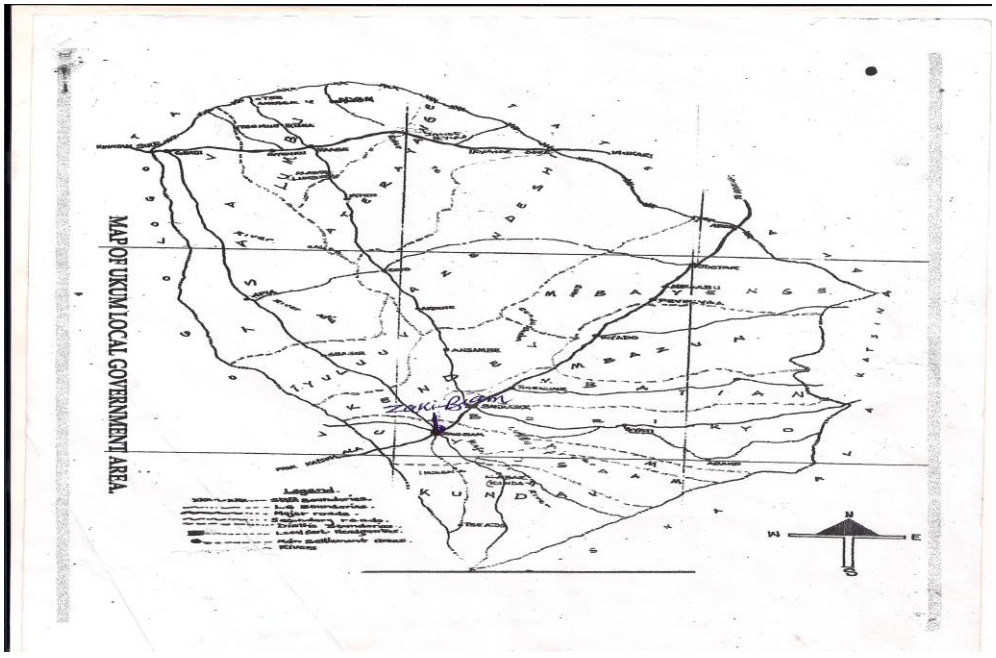

Figure4.3*: Map of Ukum Local Government Area (LGA) of Benue State*

farmers to hoe their farmlands in preparation for the actual planting season that starts in March. The annual total rainfall of Ukum as with other close regions of Nigeria is 1,200 to 1,500mm.

While the dry season starts in late October, it however gains full ground in (late) November and drags on till the month of March of the following year.

4.6. *Extensive Farming: The Main Occupation of Ukumland*

The soil texture of Ukum is predominantly coarse and, to some extent, explains why tuber and root crops, especially yams, thrive more in these areas than in many other parts of Nigeria. Ukumland has favorable natural vegetation, comprising grasses, trees and shrubs, all of which are used either for grazing[37], firewood, timber, carving, and many other construction purposes. Besides, the area is characterized by sometimes grassy and marshy vegetation, and at other places it has some long stretch of lushly trees. In some other places, the vegetation is rich and greenish; at some other places it is scanty; and at others still it is marshy and swampy. These vegetation variations are often explained by soil moisture content differentials as well as the density of annual rainfall variations. Some areas of Ukum are dotted with small and major bodies of water, mainly tributaries of the Benue River, and so reflect in the kind of crops grown in the areas: the marshier the area the more grains such as rice are grown, often in commercial quantities; the grassier and less moist the area the more tuber crops like yam and cassava are cultivated.

This natural disposition and its abundant mineral resources are surrounded and nurtured by numerous bodies of water including rivers, streams, lakes, and underground reservoirs that can be harnessed for domestic and industrial uses and for irrigated farming. While the area is not outstanding for large-scale fishing—but gets more of its fish supplies from other areas outside the State such as Ibi in Taraba State—Ukum does small-scale, scanty fishing especially from the river *Te* mainly for domestic consumption.

37 It is the case that cattle are scantily reared in Ukum area due to the infestation of tsetse fly, which is the number one enemy of cattle in the tropics.

If Benue State is called "the food basket of the nation," it is more thanks to the prodigal production of food in Ukum LGA. Aware of this Ukum people pride themselves as the power house of food production in the State of Benue and the nation at large. Grown in large, commercial quantities in Ukum include yam, cassava, sweet potato, beans, maize, millet, guinea corn, soya bean, groundnuts, tomatoes, pepper among others. In addition to large production of variety of crops and vegetables, Ukum also grows a wide range of citrus fruits all of which, together with other farm produce, are sold to buyers from across the country.

In one of its official documents Ukum LGA makes the claim: "In fact, the Local Government is the pivot […] of the Food Basket of the Nation for which Benue State is known" (Profile on Ukum Local Government of Benue State, 2012:6). What the Benue Annual "Natural and Potential for Development" (2003) Report claims for the State in general, holds even more particularly true for Ukum.

> Benue State is richly endowed with natural resources of different types. The State has vast and fertile land which is worked by an enterprising rural population. Agriculture forms the back-bone of the Benue State economy, engaging more than 70 per cent of the working population. Bush fallow using simple tools is the dominant system though mechanization and plantation agriculture/agroforestry are gradually creeping in [….] Though the farms are generally small and fragmented, ranging from less than one hectare to more than six hectares, total output is generally impressive

4.7. *Additional Occupational Activities of Ukum Population*

In addition to farming as the main economic activity of Ukum and of all Tiv, tourist activities also mark their life. These often take the form of lodges and guest houses especially around Zaki-Biam main market area, which constitutes the epicenter and hub of trade and commerce attracting thousands of people from across all parts of Nigeria. There are many yam markets; however, the one that acts most as a tourist attraction is the Zaki-Biam market, which Ukum natives claim is international in capacity and function. In addition to yam markets dotting

the face of the Ukum world, there are even many more general markets the operations of which run Monday through Saturday (see more of this on the chapter on markets). The processing of such highly valuable mineral resource as salt deposits also adds meaning to the economic life of Ukum. It is tapped by indigenes in small and large quantities and processed at various centers but especially in the *Tsaav* District. Salt thus extracted serves both domestic consumption and medical purposes. Blacksmithing also constitutes a major economic occupation in Ukumland. Those who engage in blacksmithing fabricate local farm implements used by Ukum farmers including hoes, cutlasses, diggers and other related metal tools (see more of this in the chapter on ….). Some Ukum people, especially young men, also engage in commercial molding of burnt bricks. They usually get the clay soil from swampy areas and gather needed wood from surrounding bushes.

"Tie-and-die," as it is called, that is, the process of converting white cotton materials into different colors, also factors into the gamut of Ukum economic life. This contributes to the local industry that generates the attires which Ukum people wear as cultural outfits. Weaving and wood carving are other occupations that add up to the totality of the economics of life in Ukum. This means that from their furnaces and anvils on the one hand, and woodwork tables on the other, Ukum people meet the ever-growing demand for local farm implements and hunting traps and games guns. Large quantities of these items are also sold out to other Nigerian populations. Ukum also domesticates animals like cattle but due to tsetse fly infestation they rear cattle only in a small scale. Fowls, pigs, goats and sheep are other animals Ukum domesticates, usually on free range roaming and feeding (see the section on types of farming among Ukum-Nigerian communities).

Writing on the agricultural and other aspects of the economic life of the Tiv in general Bohannan (1968) captures the true picture of Ukum.

> The Tiv are farmers. They produce and trade what they eat and wear; they build their own houses and make their own weapons, including guns, for which they import only the barrels. Thus, they practice what is commonly called a subsistence economy (p.6)[38]

It demands adding and stressing here that what is said of Tiv in general on the above point is even more the case about Ukum. Properly described, the ordinary and occupational life of the Ukums is the art of the production and marketing of food stuff, and vice versa.

Like other Tiv regions, Ukum was engaged in food production exclusively for consumption till its contact with the British colonial administration. This means that Ukum practiced pure subsistence economy till the time this contact with Europeans transformed its economy to a cash or market one. This has irreversibly changed Ukum's view of land and what uses it could be put. Bohannan's (1953:14) account in this regard is unmistakable.

> The later "history" of the Tiv is dominated, from any point of view, by their contact with Europeans. Traders have influenced their economy by introducing beniseed as a cash crop and, more recently (since the 1939-45 War), soya beans have also become an important cash crop. Missions have been present in Tivland since 1911, when the Dutch Reformed Church made its first settlement on the eastern marches of Tivland, south of Wukari; they were followed by the Roman Catholics in the 1920s (p.14)

4.8 *Culture and Language of Ukum*

Culturally, the people of Ukum are outstanding in dance. Ukumland ties its heritage in dance into music. Like the rest of the Tiv, Ukum has a division of music into the traditional and pop music types. However, this division seems only conceptual as in reality they intermesh, just as Tiv music goes hand-in-glove with their dance. This is easily seen in the most popular of their dance, namely, the *Swange*, an integration of the traditional and social aspects of Tiv culture.

38 It is of great importance to note here that the Ukum (and Tivland) of Bohannan's ethnographic experience has very irreversibly been transformed from subsistence to cash economy with so many causal linkages and implications this social transformation holds out as our study observed it.

In dress code, Ukum people have five (5) traditional attires, including the popular *Anger* (usually in black and white stripes); the *Ivavtyo*; the *Muufu*; the *Chado*; and the *Tugudu*. In fact, all five traditional attires are worn by men and women alike with the exception that the *Ivavtyo* is more preferred by women than men.

Ukum speaks Tiv language and have Tiv word for almost everything that finds expression within the experience of their linguistic milieu and the ambience of their worldview. *Tiv* is the one and general language spoken by all Ukum as with all Tiv regardless of their locations within the areas circumscribed by the people. The fact of this language uniformity and accessibility makes for easy day-to-day social interactions and transactions in social intercourse, trade and commerce between people from within and outside this particular region of Nigeria. Among Ukum indigenes, it is impossible to find people who cannot understand themselves. Essentially, this comes from the fact that, the Tiv, as with other language groups the world over, see and live their language as a systematic way of communicating ideas or feelings by use of conventionalized signs, sounds, gestures and marks having meaning (Iorshe, 2007: 156). This is further buttressed by the insight of Gbenda (2005:80) according to whom, the beauty and value of Tiv language resides immensely in folk tales, proverbs, names, idioms and witty sayings and it is also used for entertainment. Migrant settlers who have spent relatively long periods of time there or were born in Ukumland speak the language as fluently as the Ukum-Tiv indigenes themselves. *Tiv* is spoken by over two million people in Nigeria spreading beyond the confines of the State of Benue and across other

States including Taraba, Nassarawa, Plateau, Cross River and the Federal Capital Territory (FCT) of Abuja. Some speakers of Tiv language are also found in Cameroon[39].

As a language Tiv is part of the Southern Bantoid Tivoid family of languages, a branch of Benue-Congo and ultimately of the Niger-Congo language family. However, on account of their proximity to Taraba and Nassarawa States both of which are Hausa speaking geopolitical regions of Nigeria, it is quite common to find a good number of Ukum who speak Hausa. Some few Ukum speak *Igbo* and *Efik* languages belonging to the Igbo and Efik ethnic populations respectively; this is explained by the fact of spatial proximity and sharing arising from trade, travel, friendship, and marriage.

4.9 *Ukumland and Its Immediate Non-Tiv Neighbors.*

The ethnic populations from the neighboring States earlier identified as neighbors of Ukum also do many things in common with it as with other parts of Tivland. Some of these areas of cultural commonality include marriage, language, trade, commerce, artifacts, dance, farming patterns, land tenure, types of crop grown, and sometimes housing patterns. It is very common, for example, to meet women from Ukum married to men from Rafi-Nkada, Wukari and Tor Donga all of which are communities in Taraba State. Another striking example is that at the Rafin-Nkada market, which is in Taraba territory and one of Ukum's closest neighbors, more than 50 percent of the groundnuts produced in the Mbaterem communities of Ukumland is moved over to and traded there every week. Similarly, many Ukum farmers from both Mbaterem and Mbatian communities carry their agricultural produce of all kinds to Tor Donga market, which is also in Taraba State

39 This would not be surprising if we put it within the context of the fact that Cameroon (but more so Sudan) is pivotal in the migration history of the people of Tiv who finally settled in this part of Nigeria called Benue.

and, by so doing, they target traders from other parts of Nigeria especially Cross River State and the Igboland both of which belong to the Southeastern region of the country. Danacha market in Taraba State is another popular agricultural produce market that provides a ready business niche for people from Ukum especially those from the Mbaterem communities.

The main point of these representations is that these markets in Wukari, Danacha, Tor Donga, and Rafi-Nkada are all in Taraba State. This study also found that Ukum farmers get part of their hired farm labor from their neighboring populations especially Jukun men from parts of Taraba State and Ogoja men from Cross River State. This aspect of inter-ethnic interactions and inter-state relations provides another lens for further investigation into the political economy of rural agriculture and markets in such parts of Nigeria in particular and Sub-Saharan Africa in general. This kind of social phenomenon becomes even more curious for more anthropological study considering the fact that these same communities are very incessantly lurked in often violent conflicts which, doubtless, affect food production and distribution and hence national economy rather very adversely (see more of this in chapter 11).

4.10. *Conclusion: Chapter Summations.*

Chapter 4 has enriched our knowledge of Ukumland and rural SSA with some agricultural production related basic facts that we need to put out here especially as they have implications that speak to the main focus of our study motif. These include but not limited to:

1) Demographically, there has been tremendous growth in the population of Ukumland as is shown in the difference between the census figures of 1991and 2006.

2) Ukumland is very fertile made further favorable to the mass production of a wide range of crops and citrus by being surrounded by many tributaries of the Benue River.

3) In addition to being richly endowed with many minerals, Ukumland is also blessed with a variety of vegetation across different parts of the region.

4) All these, in addition to relatively good distribution of annual rainfall collectively create a great disposition that makes the land conducive for agriculture.

5) Ukum has a powerhouse of an enterprising and growing energetic population that puts all these natural dispositions into productive work especially agriculture.

6) In addition to agricultural production, which is Ukum's main occupation, the people also conduct other economic activities including but not limited to tourism, trading, extraction of the minerals in the ecology, blacksmithing, burnt bricks making, tie-and-die, weaving, animal domestication and wood carving.

7) Ukums are surrounding by many equally enterprising neighbors with whom they engage in trading, marriage, farming, and so are intermeshed in inter-ethnic, inter-State social relations.

8) Yet, these same varying spheres of social interface awaken curiosities surrounding the fact that Ukumland has for decades been lurked in often violent conflicts that disrupt the economic and other activities they share in common especially agricultural production and trading.

Chapter 5: Ukum Social Organization: Agricultural Production Connection

5.1 *Chapter Overview*

It should be put in perspective again that this study is no attempt at a comprehensive anthropological treatise on Ukum as a people, but rather a case study aimed at exploring the political economy of agricultural development in rural parts of Nigeria and SSA. This chapter explores the social organization of Ukumland but only as far as it relates to and helps our understanding of the phenomenon of agricultural development in this region on the one hand, and the factors affecting its operations on the other. Additionally, it is hoped that the study of agricultural production will throw light on how social change in turn shapes the varied adjustments in the social organization and political structure of SSA communities.

Like Forde (1964) did in Umor village of Yako, Cross River State, the main objective for this inclusion on the social organization of the population selected for this case study is that there is a relationship between physical environment and the way or ways people organize themselves in relation to it especially in relation to how land and other things that give meaning to the physical environment are institutionally appropriated in the making of their economic life. This is more so in relation to the use of land—"[…] that often difficult and dangerous topic […]" (Forde, 1964:1). This assumption is predicated more so on the fact that (social) anthropologists study human beings and the associations found among them, and so in the institutions that are born, reproduced and maintained in the associations between and among individuals, and between and among individuals and groups. The chapter is concerned with the social organization of Ukum in terms of the social institutions born in these complex human associations (Radcliffe-Brown, 1965; Smith, 1992), and in the political structure for social control. As such the chapter focuses on the social institutions of the family, the compound, marriage pattern, women, age grades and their

function/s in Ukumland only in so far as they help our understanding of their role in agricultural development in the region.

5.2 *Ukum Social Organization*

Like the rest of Tivland, Ukum is lineage and kindred centered. This shows almost in every sphere of their social life. A striking illustration is the Tiv sociological concept of ***tar*** around which Ukum and Tiv social organization is construed (Rubingh, 1969:64). The concept of *tar* refers to an area or section of the wider Tiv community circumscribing a genealogically constructed group of families and compounds whose agnatic nodes hold together into lineages and kindreds. "*Tar* refers to an area containing a group of people bound together by kinship relationships" (Rubingh, 1969:64). Specifically, *tar* does not refer so much to a mere physical territorial space as to the community of people inhabiting it. Put more pointedly, "A *tar* is a place, but primarily a peopled place […] *Tar* is, in short, the area inhabited by a lineage" (Rubingh, 1969:65).

In the light of the above, and in the light more so of how the present-day Ukum lives out their sense of *tar*; it is impossible to understand their sociopolitics as with all Tivland without understanding the sociological and or cultural underpinnings of lineages and kindreds in Ukumland especially as they relate to the focus of this study. This is more so since marriage patterns, family structures, arrangement of huts in compounds, property ownership and transfer and their social correlates hinge on the kindreds and lineages that give meaning to individual and collective senses of belonging. As Bohannan (1989:1) writes,

> To understand the social relations of the Tiv, the cultural idiom in which they are conducted, and the terms in which both are imagined and valued, we need to know something about one concept that is fundamental. That concept is *tar*. A *tar* is a territory occupied by a lineage segment (*ipaven*). Tiv organize themselves into what is called, in anthropological English, a lineage system. They formulate this organization in terms of genealogies running back patrilineally seventeen or eighteen generations from themselves

to 'Tiv', the original ancestor of them all. These social groups, who call themselves by the plural form of their agnatic ancestor's name, form the basis of communities

5.3 *Ukum Political Structure*

From the foregoing, the social structure of Ukum, as with all Tivland, is organized around the kindred segments that branch out from lineages, which in turn form the hub of social reproduction and stability. So that, looked at from the perspective of how the people govern themselves politically, one sees that the lineage-based kindreds constitute the fulcrum of life. The two figures (5A and 5B) that follow are the present researcher's attempts at conceptualizing Ukum sociopolitical structure.

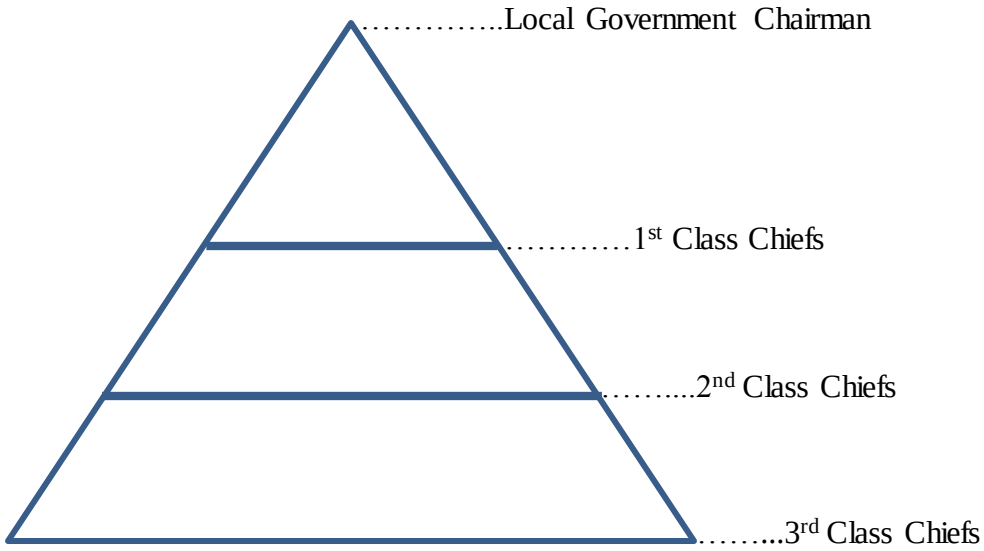

Figure 5A*: A Pyramidal/Triangular Illustration of Ukum-Tivland Political Structure*

Figure 5A shows that the gradation of the Chiefs in Ukumland is a reflection of the hierarchy of a people who, however, are egalitarian (Bohannan, 1964). It also shows—in the present times—how the officially appointed Local Government Chairman is at the apex of political affairs in Ukumland, though he could not function and could not take decisions that affect the communities where, for example, the 3rd Class Chiefs operate, without the direct involvement of these kindred heads (Fieldnotes: August 21, 2012).

Looked at from yet another point of view—though communicating the same semiotic message—the figure (5B) below shows how the happening point of Ukum sociopolitics is within the 3rd Class Chief's domain even though he is at the lowest rung of affairs and so below the 2nd Class and 1st Class Chiefs before the Local Government Chairman who is at the helm of affairs in the management of the people's communal life.

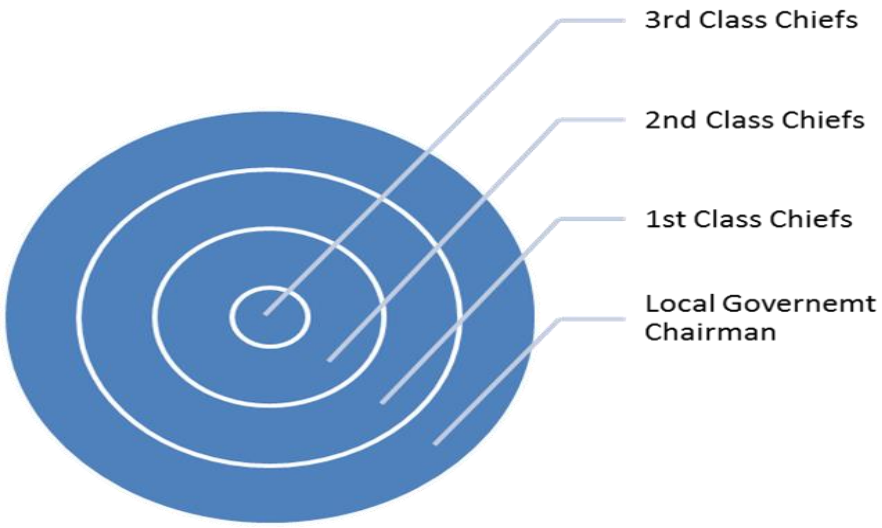

Figure 5B*: An Inside-Out Spiral Illustration of Ukum-Tivland Political Structure*

Viewed from the daily lived experience of the agreement between these two ways of interpreting Ukum sociopolitical structure, one can see that the people, not power conferred by social or political position, are the life of the community. In this lies the egalitarian nature of Ukum social life. For, from the first figure (5A), the people in the domain of the 3rd Class Chief—the kindred level—provide the base and fulcrum of the land. On the other hand, looked at from the point of view of the second figure (5B), the people at the 3rd Class Chief—the kindred level—provide the core and nucleus of the society. In both cases, therefore, we are faced with the fact that *kindrecracy* (our coinage) is the hub of life in Ukum.

According to an informant's narrative (Fieldnotes: August 21, 2012), there are 13 Districts in Ukum LGA with 13 corresponding District Heads. These 13 Districts have their administrative

and commercial centers at Sankera and Zaki-Biam respectively. However, since the Tiv in general are both democratic and egalitarian, Ukum people also follow these processes in their social and political organization. Each District follows the same pattern in selecting who becomes their Head and makes sure that their District is run according their age-long Tiv tradition. For example, becoming the Head of the *Uyam* District, five (5) kindreds (*Bagar*, *Bagi*, *Bamena*, *Uyo*, and *Mase*) is not a matter of personal achievement (achieved status)[40]; it is rather done rotationally among these five kindreds. This rotational pattern is rooted in the general Tiv tradition couched in the customary idiom and maxim: "*Yan a wan ingbian*" (transliterated as "eat and let your brother eat"). This is the typology and epitome of Tiv traditional democratic egalitarianism. With this customary norm makes it impossible for one District to dominate the rest (Fieldnotes: August 23, 2012).

At the expiration of one tenure and about to begin another, the very kindred whose turn it is to occupy the traditional stool presents the men they deem fit for the office; from among them one is selected and brought forward as the people's choice. The kindred selects eight (8) elders whose responsibility it is to sit and screen the candidates and find out the one who is most fitting. The elders present their choice to the *Ke Ukum*—the overall District Head of the 13 Districts of Ukum LGA. *Ke Ukum* is a Second Class Chief and above the third Class Chiefs of the 13 Districts. The *Ke Ukum* in turn presents the District Head elect to the overall Head of Chiefs in Tivland and usually from Gboko, the traditional Headquarters of Tivland. This overall Chief is a First Class Chief. And finally, the First Class Chief at Gboko presents the Third Class Chief elect as the District Head to the Governor of the State for installation and swearing in ceremony.

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40 In anthropological investigations of social life across societies, a distinction is made between *ascribed* and *achieved* statuses. While an ascribed status is that into which one "rolls" by the mere fact of being a member of a kindred or community such as a member of an age set; an achieved status is a social position which one assumes by the fact often of personal efforts and achievements. A striking example is being conferred with the title of chief farmer, which is a measure of the individual's distinguishing accomplishments in farming.

On another level of the social structure of Ukum (and of Tivland as a whole) it is worth underscoring that the politically appointed Chairman of the LGA is the Chief Executive of the area while the District Heads are only role performers who, however, work in their capacities as traditional heads in service of the entire LGA. Be that as it may, there are areas of administration, as we mentioned earlier, in which the Executive Chairman of the LGA could not take decisions without due consultation with the District Heads. For example, if a land crisis arises within or between Districts, he must first consult with the District Head/s of the affected District/s before he mediates in the matter, if need be. This underscores the primacy of Districts and above all of the kindreds and lineages that make up the Districts in Ukum as in all Tivland.

5.4 *The Family and Compound Social Institutions in Ukum*

The family institution provides a very interestingly important social setting in Ukum just as it lends itself to a better understanding of the social organization of the people. For Ukum people, the nuclear family is the center of their community, both in terms of life as lived and in terms of their social structure, which hardly differ from each other. Family arrangement in Ukum is inseparably linked with their marriage regulations, with the placement of houses in compounds reflecting also in social roles and in the division of labor. We adopt Barnes' (1971) genealogically engineered definition of family, especially as it fits into and reflects the Ukum situation.

> In many senses the most distinctive and fundamental human institution is the nuclear family, founded on the two concepts of marriage and parentage and consisting of man, wife, and children. It is not surprising that the family has provided us with a matrix for many other institutions.

All things being equal, every Ukum family is both patrilineal and patrilocal[41], regardless of whether it is monogamous or polygamous. This practice of patrilocality exhibits itself, for example, in the arrangement of huts in every compound. The man of the family always has a hut (*ate*) at the center of the family compound—a social space for meeting with his family members and outsiders for various purposes including and especially gatherings to have deliberations on family and kindred matters and for purposes of commensality. This is illustrated in the diagram that follows (Figure 5C) which shows a typical Tiv polygamous compound (*ya*). It reflects the arrangement of huts in a compound, pointing at the same time to the patrilineal and patrilocal nature of the family and compound settings in Ukum.

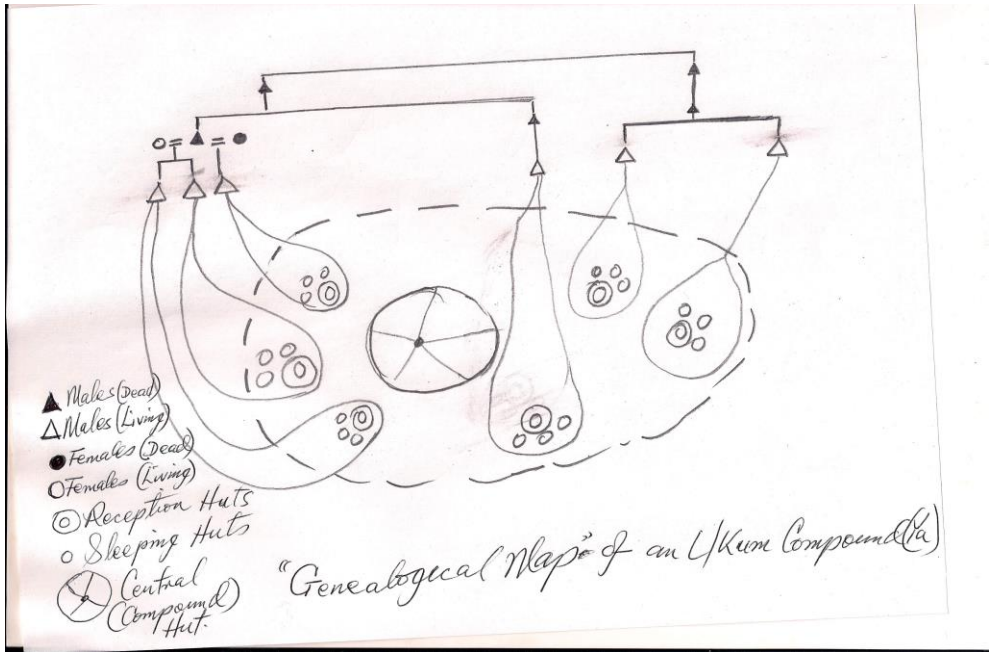


Figure 5C*: A Typical Compound—a Conglomerate/Agglutination of Families traced to a Common Genealogical Tree, with one man as the Compound Head (*the *"or u ya").*

41 Patrilocality refers to a marriage pattern in which the couple settles in the husband's home or community implying, therefore, that woman moves over to and with the husband's home for the rest of the marriage all things being equal.

The Tiv compound (*ya*) is usually a cluster of many families bound together by close links of agnation as units having a common father and which have usually complex genealogies that reflect in social belonging, ownership and inheritance regulations. The oldest man in the compound—the *"or u ya"*—otherwise known as the man of the compound is the head and is always the oldest in the compound. His place can only be replaced at death. To him belongs the "authority" to be exercised on major issues that take place within this social space. For example, he must be consulted before any new huts are put up; he coordinates the farming activities of those in his compound regardless of the fact that every male has a voice on such matters (Bohannan, 1968:16)—a reflection of the Ukum egalitarianism (Fieldnotes: September 3, 5, 2012).

The centrality of this hut shows how it is a customary given that the oldest man is the *owner* of the family and compound. Other huts—the man's sleeping house, the women's huts, animal pens, farm produce storages—are arranged around this culturally symbolic hut of the man as head of the compound. If a man married many wives, theirs will surround his with the main hut always at the center of the compound.

As is typified in the picture below (Figure 5D), all Tiv build and live in this kind of hut as is seen. As Bohannan's (1968:14) description goes:

> Tiv live in circular huts having what are said to be the thinnest mud walls in Northern[42] Nigeria, pounded mud floors, built-in fireplaces, and sometimes built-in storage and drying platforms of hard wood. The hut is thatched with sword grass […] braided into long strips and wound around the conical roof from bottom to top.

42 That Bohannan refers to Tiv huts in connection with "Northern Nigeria" is a reflection of the chasm in time between their ethnography and ours. By the time of Bohannan's study of this part of Nigeria, that is, Tivland as a hole was still part of the large Northern Protectorate as against the present moment when that Protectorate has been split into many States including Benue part of which Tivland is (see also chapter 1—section 1 for more details on this).

Figure 5D: *Physiognomic look of a typical Hut in Ukum-Tivland*

All the children born to a man, male and female, go by man's name. In the same way their children are often seen pulling, working, eating, and playing together regardless of the fact that they were given birth to by different women. This is typified in the picture below (Figure 5E) showing how many children of an Mbatian-Ukum polygamous family spend their Sunday afternoons and evenings (Fieldnotes: August 19, 2012).

Figure 5E: *Children of an Mbaterem District family work on groundnuts of one of their senior brothers: Team and family spirit in Ukum even in a polygamous family as this.*

These children are working together on groundnuts displayed on a flat surface in the *ate* at the center of their fathers' (and grandfather's) compound. These children—and grandchildren—work together without discrimination regardless of the fact that the heap of groundnuts they were cleaning belonged to one of their senior brothers. Similarly, they do not discriminate in eating regardless of whose mother provides food.

In working on their farms, the man, his wife/wives and children, are all involved. We shall come back to this point when we get to discussing the supply and division of farm labor within the wider scope of factors of agricultural production. Every wife, even in Ukum polygamous families, has the filial, customary obligation of cooking and serving her husband the major meals of the day. Family kitchens are almost always the exclusive customary domain of the wife. Extramarital sexual relations are considered a taboo and a desacrelization of Ukumland; accordingly it is a thing every man and woman avoids as it brings huge burdens usually involving expensive ritual cleansing for both the individual/s and the community.

5.5 *Ukum Kindrecracy: The Primacy of the Kindred in Ukum Social Structure*

Whether from the perspective of the family, of marriage, of sociopolitical organization, more so of living arrangements, land tenure, ownership and inheritance and or property transfer, the kindred to which one belongs is always the centripetal/centrifugal and defining point of reference in everything pertaining to life in Ukumland. This makes it a point of striking importance to be accorded some hermeneutic contextualition as is done here. The kindred is the defining category that places every individual member of Ukum and locates him where he belongs regardless of whatever social positions—ascribed and or achieved statuses—the individual occupies. As such, no individual person has citizenship in Ukum outside his/her kindred. It is all about social ties of kinship which, according Fox (1967), is "[…] simply the relations between

'kin', i.e. persons related by real, putative or fictive consanguinity [….] Once we accept that 'consanguinity' is a socially defined quality, the definition of kinship holds" (Pp.33, 34-5).

According to a study informant (Fieldnotes: August 10, 2013), a kindred usually starts with one man. For example, *Mbagar* kindred was founded by a man called *Gar*, *Mbagar* being an amalgam of two words: *Mba*—(the prefix)—referring to the offspring or generations which, over time, have grown out of Gar—the man who founded the kindred now called *Mbagar*. As in the case of *Mbagar*, this line of continuity and customary way of belonging—only validated within the kindred—is regardless of how many generations that have grown out of this original trunk of the kindred founder.

In the case of the above example again, our informant recalls that Gar married one wife who begot him a man called *Aku*. *Aku* in turn had two sons, *Wake* and *Wuado*: *Wake* was succeeded by two sons, *Biam* and *Tion*; *Wuado* was survived by two sons as well and were called *Ankunya* and *Erukaa*. These details are laid out in our conceptualization below (Figure 5F).

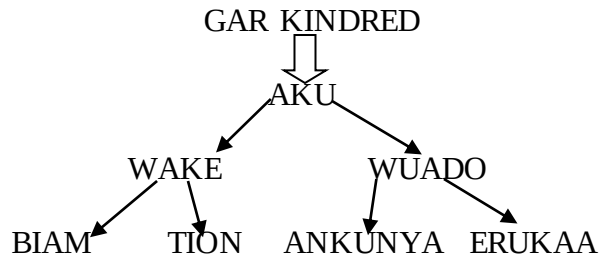


Figure 5F: *The Constituent Parts and Pattern of the Kindred in Ukumland*

As the diagram (Figure 5F) illustrates, all the female children born to Gar, the founder of the Mbagar kindred, as in all other Ukum and Tiv kindreds, are completely unmentioned. This is simply a matter of custom and tradition. So that, should any other kindreds be taken up and their tree of succession plotted, all females born to the men in them will be totally absent: "They do not belong," the Tiv claim goes (Fieldnotes: August 10, 2012).

The puzzle surrounding this customary norm thickens when considered against the fact that in some families the (male) children go by the name of the women who gave birth to them. Groping for some explanation for this practice elicited only stereotyped answers like: "That is how it goes here in our land: some go by their father's name, while others are named after their mother" (Fieldnotes: August 15, 2012).

Figure 5G: *Chief Alibo Hinnoh (extreme right) of Mbatian District Meet with his Council of Elders according to kindred lines and discussing my request to live with them for my study (Fieldnotes: August 18, 2013)*

Meetings are held according to families that belong to the same kindred. In response to the question as to what are the make-up of an Ukum kindred, a group of elderly men who gathered for a group interview used their own—Mbatsavazun—as an instructive, illustrative case in point. According to their narrative, Mbatsavazun kindred is made up of many villages including Bom, Ayaba, Ukpen, Anini, Bonyam, Tuse, Uyoo, Agbe, Iormbaakaa, Kyaave, Kyaanbee, Ager, Mbadiga, Tyoga, Ubee, Agbonoo, Oruma. The villages that make up the kindred vary in size; besides, every village is in turn made up of many compounds (*ya*) of varying sizes. Every Ukum kindred has a traditional head, that is, a Second Class Chief, a Council of Tax Collectors, and

Council of Elders. For example, the traditional head of Mbatsavazun is Chief Samuel Shima Butu who hails from Bom Village. The affairs of the kindred are overseen by the traditional head with his council of elders and tax collectors.

The aforementioned villages, as in other kindreds, do not stand autonomous or isolated one from/against the rest; rather, they are grouped into four Tribes: Mbadula, Mbayakaa, Mbaliam, and Mbamenaka. We recall again that the prefix "Mba" specifies and refers to the progeny, and specifically sons, of a particular man. At the kindred general Council, every tribe is represented by three elders and a number of tax collectors from the villages determined by the numerical strength of the village. Should there arise any financial contributions to be made by the entire kindred, for example, the total amount is shared out equally between the kindreds which in turn breaks it down among their respective villages. Similarly, when there are benefits to be shared in the kindred, the whole process of equitable distribution is followed regardless of numerical strength differentials among the villages that make up the wider agnatic group.

The office of the Chief of the kindred is not hereditary but rotational among its constituent four tribes. The Chief of the kindred does not decide over issues concerning the life of the kindred alone but always in due consultation with the Councils of Elders and Tax Collectors. Whoever becomes the Chief of the kindred and so represents his group exercises the office for as long as he lives and, at his death, the traditional stool of the kindred leaves his kindred for another which in turn is represented by a man whom is selected to stand for the stool. If any major thing happens in one village it affects the entire kindred. For example, if an elderly man or woman dies in any one village, his or her funeral entails the involvement of the entire kindred.

As we already saw, kindred lines define and determine where one is to marry from and to be married into; they stipulate the patterns of land ownership, property transfer or inheritance. The

same facts define patterns of living and arrangement of houses in the compounds and communities that fall within Ukum and Tivland as a whole. As Ukum people anticipate the next planting season, all the men who have come of age in a kindred come together as a group and in consultation with the compound head (*or u ya*), to decide which areas to carry their farm work to that year. In this way it is easy to maintain links—even in farmlands—with people from one's kindred. In the actual exercise of work in the farm, members of one's kindred are his immediate and nearest neighbors who would also watch out for each other's portions of cropland.

In fact, what Victor C. Uchendu (1965) had written about the Igbo of the Southeastern Nigeria—close and friendly neighbors of the Tiv—well fits into the Ukum *kindrecratic* worldview as we witnessed in this study. As his documentation goes, "An Igbo without *umunna*—a patrilineage—(a close equivalent of the Tiv sense of kindred) is an Igbo without citizenship both in the world of the man and in the world of the ancestors" (p.12).

Figure 5H: *Researcher eating boiled yam with his adopted kinsmen from different families of the Mbatian District—after my requested was approved and I was adopted (August 20, 2013)*

While Ukum lavish sense of brotherliness and hospitality would allow and even encourage anybody to join any family when and where he meets them in commensality, it is the case, however, that eating patterns also follow families that belong to the same kindred; this bespeaks which family/kindred one belongs to. As the picture (Figure 5H) above shows, researcher eats boiled yam with his "brothers" from different families of his adopted kindred in Mbatian District of Ukumland.

5.6 *Marriage Institution in Ukum*

As in many parts of Nigeria and SSA, Ukum enter into marriage primarily for getting children, and preferably male children who would keep a man's name and lineage ever alive. In this case the family institution is directly tied to the generation of offspring (Labeodan, 2001:5). Whether in its monogamous or polygamous occurrences, Ukum always regards the marriage institution not only as a sacred thing but also as the very fulcrum of social reproduction. Both our male and female study participants submitted that the pattern of getting married in Ukum begins with the process whereby a man indicates interest in a woman he wants to marry: the man woos the woman; if she accepts his proposal, he meets her parents and kinsmen to declare his interest (Fieldnotes: September 13, 2012).

Prior to 1927—when Tiv people in collaboration with the colonial government abolished it—*kem*—which means "exchange marriage"—was the customary norm. (Fieldnotes: September 13, 2012; October 17, 2013). Bohannan's (1953) interpretive caveat affirms the discomfiture of some present-day Ukums regarding the problematic nature of the seeming simplicity of kem; the same reasons that seem to explain why Tiv encounter with Britain wiped it out, though not without sometimes harsh resistance.

> In theory, exchange marriage is ideally simple. Every man takes his immediately younger sister (his *ityongo*) as his marriage ward (*ingol*), gives her to another man, who in turn gives

> him his ward as wife. These two women, called exchange partners (*ikar*), then bear children of the same number and sex. At the death of the wives, the matter is finished. In practice, complications arose at every step (Bohannan, 1953:69).

As a matter of fact embedded in the history of marriage in Ukum-Tivland, there were other forms of marriage patterns that had some resemblance to the undiluted practice of exchange marriage. These included marriage by capture and marriage my purchase. In marriage by capture, there is an arrangement between two generally adjoining lineages, to allow the mutual capture of wives, that is, marriage by elopement, but without revenge. In marriage by purchase, on the other hand, a man purchased a wife with items of wealth such as cloth, cattle, or brass rods. However, the man kept the children born him in this marriage till his death when they stood the risk of being considered slaves (Fieldnotes: September 29, 2012; Bohannan, 1953:71).

These forms of marriage practice in Ukum have disappeared completely as our study did witness any single case of either pure exchange marriage (*kem*), capture marriage or marriage by purchase. In the present dispensation as we found it, and as it seems to have been the case since 1927, marriage takes the form of bridewealth, usually "one or two pounds, a goat, and the gifts not considered returnable or part of the bridewealth" (Bohannan, 1953:72). The fact of something being exchanged, that is, something given to the family of the woman being married, still seems to make this form of marriage to be perceived and described as *kem* in the sense of the transmission of certain gifts to the mother- and father-in-law, which suffice to allow the bride to be taken to her husband's home as a fully married woman. Ability to work hard in the farm is not a criterion for choosing who to marry, both for the male and the female; it is taken for granted that anybody—male or female—born into the Ukum country is born into that ability.

Marriage pattern in Ukum is both monogamous and polygamous. Whether married into a monogamous or polygamous setting, a woman was free to return to his father's compound at the

death of her husband. While monogamy is predominant today, there are, however, many cases of polygamy, not only among old but also among young men. The need for many more hands for farm work was always the explanation for polygamy. (Fieldnotes: October 3, 2013). A certain State-acclaimed Chief Farmer, who said he married up to twenty wives, is only one out of many cases of Ukum men who married many wives. Hardly up to 70 years of age, some of his sons have also married more than one wife; each of them offered the same reason for polygamy.

Another noteworthy ethnographic find among the Ukum is that marriage is both endogamic[43] and exogamic[44]. Instances abound of cases of Ukum men and women who married outside of Ukum; some married men and women who came from other parts of Nigeria to the Zaki-Biam and Kaydo market areas, for example, either to do business and go or to live there permanently. However, in the predominance, marriage among this population is endogamic. Culturally appraised, their explanation is that it helps to keep Ukum cultural heritage intact and enhances its social reproduction.

Even at that, when and where marriage is purely endogamic among the Ukum, care is taken to ensure that contracting marriage does not strain kindred agnatic lines. This is because no man or woman, by custom and tradition, is allowed to marry within his or her own kindred. To avert the problem of a rippling curse this might bring should it happen even if by error, the process of getting married in Ukum is a rigorous and painstaking one. This is with the intention to ascertain that people who are intending to marry are not by any means close to each other by any stroke of kinship or consanguine relationship. Should this ancient norm be violated, the abomination must

43 Endogamy is the marriage custom in which it is permissible to marry only from within the limits of one's local community, clan, or tribe.

44 Exogamy is the marriage rule which allows marriage outside one's own kin group.

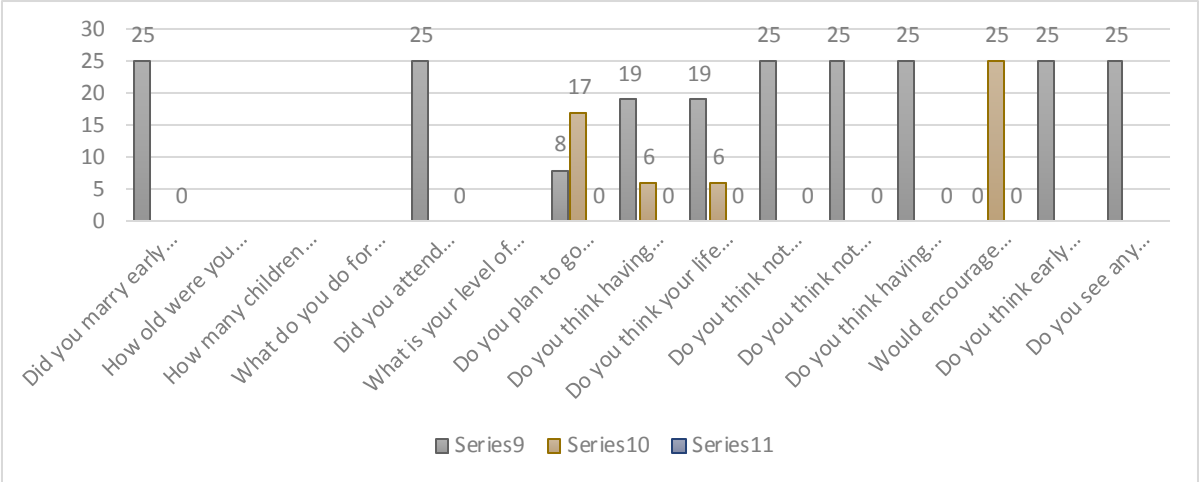
be cleansed in such a way that the persons and the entire community are rid of the problems it brings upon them. For example, if two young adults (opposite sexes) from the same kindred are caught in sexual relations, they both are put in a raffia-made hut and it is set ablaze while they are inside of it. When the fire begins to blaze, they run out of it naked surrendering their clothes to the flames of fire. This, Ukum elders explain, signifies that the dirt of contamination they brought upon themselves and their community has been burnt and blotted out by this act of "firing them" out of the hut, just as a blacksmith uses the fire to purify a piece of metal by burning out the dross on it (Fieldnotes: October 3, 2013).

5.7 *Early Marriage, Level of Education, Socioeconomics and Agricultural Dev in Nigeria*

We dedicate the last part of this section to examining the agricultural production implications of early marriage on SSA farming households. In addition to the application of direct observation and one-on-one interviews, we also floated questionnaires on this issues tracking how early marriage, which we found to usually go hand-in-hand with low level of education or literacy in rural SSA. By keeping agricultural production as a constant, our aim was to find out how the combination of these two variables—of early marriage and low level of education or lack thereof—affect SSA farming households. The table (5.1) below has the details.

Table 5.1: *The Impact of Early Marriage and Low Level of Education on Agric. Dev. in Nigeria*

Questions	Yes	No	Declined	Age at Marriage		No of Children		Earning for Living		Level of Education	
Did you marry early in life?	25		0	15-25 yrs	16-30 yrs	1/62016	7 & above	Farming	Trading		
How old were you when you at marrige?				23	2					Primary	Secondary
How many children do you have?						21	4				
What do you do for your living?								23	2		
Did you attend school before you got married?	25		0								
What is your level of education?										11	14
Do you plan to go back to school to for higher education?	8	17	0								
Do you think having no education makes people poor?	19	6	0								
Do you think your life would have been different if you had good education?	19	6	0								
Do you think not having good education affects your children now?	25		0								
Do you think not having good education affects your children in future?	25		0								
Do you think having good education could help a farmer have better knowledge?	25		0								
Would encourage your children, male and female, to marry early?	0	25	0								
Do you think early marriage stands in the way of people's progress in life?	25										
Do you see any connecton with early marriage and poverty in general?	25										



5.8 *Data Analysis: Impact of Early Marriage and Low Education on Agric. Dev. In SSA*

From the table (5.1) and the corresponding chart above, we see very high significance of negative impact the two variables of early marriage and low level of education have on agricultural production in SSA. All 25 respondents admitted having married early in life—with 23 having married between the ages of 15 and 25 as against only 2 who married between 16 and 30 years of age; that not having any meaningful education affects their children in the present and will also affect them in future; that having good education gives the farmer the advantage of better knowledge; that early marriage stands in the way of their progress in life with 19nout of 25 stating knowing that lack of education makes them poor; and that it makes people generally poor as all 25 accented. It is not surprising, therefore, that all our 25 study participants stated they would not encourage their children—male and female—into early marriage, apparently counting from their own experience of having married early and so forfeited the opportunity for some good education and the varied metrics of empowerment and improved social capital it confers on people. This is more so considering that none of the 25 respondents went beyond basic education: 14 said they reached secondary school level whereas 11 stopped at the elementary level. From our respondents' submissions it is deducible that low level of education makes a good percentage of rural SSA

population stop only as farmers and traders—23 and 2 respectively. For the same reasons majority of our respondents—19 out of 25—expressed knowing their lives would have been better should they have had good education in addition to farming. Surprisingly, however, instead of seeing that majority, if not all respondents, would have been burning with desire for going back to school, only a number as low as 8 stated they plan doing so. Our conjecture is that many of these farmers see no need having lost the initial opportunities, or they lack the funds to back up the desire, or they are saddled with the responsibility of providing for the many children they had already proliferated in spite of their poverty. The last point seems to inch closest to the reason—we assume—seeing that all 25 respondents have many children: 21 have between 1 and 6 while 4 have as many as 7 or more children.

5.9 *Conclusion: Chapter Summations*

From the foregoing parts of this chapter we can pin-point some strong linkages between agricultural development and the social organization of SSA rural populations. Some of these are:

1) There a correlation between the ways SSA communities' social organization is imagined and constructed and the ways they interact with their physical environment in their effort to make their living out of it.

2) It is instructive that this connection should be very scientifically studied and factored into whatever programs that go in the name of agricultural development in the region still almost all practices of land appropriation for agricultural production are still largely institutionalized.

3) This is also the number step that should be taken in putting a break on approaching agricultural development as a process instead of a process (see the last chapter of this dissertation).

4) Ukumland—and by extension other SSA communities—constructs its meaning of existence around kinship ties in which the individual human being's identity and citizenship are defined and given meaning in respect of everything about him and the community to which he belongs.

5) As such, everything about the individual—the family, the compound, property ownership and transfer—revolves around this social matrix of belonging and the derivation of its meaning.

6) Unfortunately, this same social organizational given provides a handicap as to the quantity of land every male could have at any point in time since all land belongs to the compound a member of which he is and where he could not have as much as is desire to meet his farming needs.

7) For the same reason of having citizenship and entitlement to land by being born into a particular compound in addition to being male, women have no land rights in many SSA regions

8) Whereas it is found that farming makes majority of SSA populations marry early, it was also found that this makes many miss acquiring any meaningful education or none at all.

9) These two factors turn around to haunt and hurt SSA rural farmers who remain poor and also see their children go through the same if not worse throes of poverty.

10) These same factors, in addition to other social organization related factors, make realizing the MDGs targets of ending hunger, poverty reduction, gender equality far-fetched dreams.

SECTION THREE: FACTORS OF AGRICULTURAL PRODUCTION IN NIGERIA

Chapter 6: Land as a Factor of Agricultural Production in Ukumland and Nigeria

6.1 *Chapter Overview*

Across the globe land is of prime importance in matters of food production; this is true of past and present moments in the progressive development of man's interaction with his ecosystem and the evolutionary stages marking man's transition from foraging to agriculture. So pivotal and central to food production is land that Mikell (1992:12) identifies and characterizes it as critical among the factors of production. The critical importance of land especially among African agrarian populations is part of the reason Forde (1937:24) observes that inquiries about it often constitute difficult and dangerous topic. This is more so the case when we put into historical perspective the often turbulent reforms the social institutions of land tenure, land rights and holdings have undergone in the progressive development of Africa as in other regions of the world: from customary land tenure to the contemporary dispensation of state-controlled statutory land tenure and land right reforms (Wily, 2012; United Nations, 2009).

Land as a factor of production does not matter so much for its own sake as it does for its essential function in rural and economic development in general and more so in the production of food in particular as the most basic of all human needs (FAO, 2002). This is even more serious in the case of Nigeria where agriculture is land based (Fabiyi, 2011:548). As Herskovits (1952) writes, "[…] food is the most essential single requirement for survival—even more than shelter, and certainly more than clothing" (p.86). Not in vain does the Committee for International Cooperation in National Research in Demography (CICRED, 2007:9) stress that, "[…] land is the heart of all farming systems." These point to the centrality of land especially among

Nigerian-SSA communities for which agricultural production constitutes the dominant economic occupation (Fabiyi, 2011:548).

We use the concept of land in the comprehensive sense of the term—even if for convenience—to refer not only to the mere crust of the earth, but also to other natural resources such as water, trees and minerals that are associated with it (FAO, 2002:7). In other words, we use and apply the concept of land here in the sense of the totality of man's habitat, that is, his natural environment with which he interacts in different ways to earn his living. In simple terms, therefore, our usage of land here refers to that natural environment of man which he manipulates with whatever technologies at his disposal to create his economic system/s (Herskovits, 1952:86; Hunter and Whitten, 1976:230-7), whether at the levels of collecting, hunting, fishing, cultivation, and stock-raising though none of these necessarily exists in pure, single and exclusive form, but often in varying combinations.

Whatever could be said on the centrality of land in relation to food production among rural parts of the world where farming is the main source of livelihood seems to be more the case of SSA. Rural populations of Nigeria as with some other areas of SSA have repeatedly been documented (and represented) as not only almost exclusively dependent on farming as their main source of survival but also as contributing in no small measure to the GDP of their nations through their earnings in agro activities. Ukumland provides not only a typical case for understanding the primacy of place land occupies among factors of agricultural production but also a landscape for the study of other related issues to be examined in this chapter. These include sources and processes of farmland acquisition in rural parts of Nigeria as with many other parts of SSA which, logically, puts into perspective the role a people's social organization plays in matters of farmland acquisition in SSA; the place of land tenure in Ukum, in Nigeria

and SSA (see chapter 5); family size vis-à-vis farmland size in relation to food production; land, population pressure and agricultural production in the area; land inheritance and holdings as the politics of social mobility and inclusion and exclusion; and by focusing on the overall aim of this study, showing how land as a factor agricultural production impacts output and food security in a multistranded way in Nigeria in particular and, by extension SSA in general.

By appealing to field data alongside relevant literature on this subject, the overall aim of this chapter is to make a close examination of how land as a factor of agricultural production impacts agricultural and community development in Ukumland as in other rural parts of Nigeria.

6.2 *Sources and Processes of Land Acquisition in Ukum*

As was documented in the section on the cultural givens of the kindred in Ukum, the overarching prerequisite of belonging to, and citizenship in, any Ukum-Tiv agnatic group is being born into it. As such, the primary and, in some cases the only, source of land to any Ukum individual male is membership in the family and kindred into which he is born. Once a young man comes of age, that is, once he takes a wife, he is entitled to some portions of land to set up his own hut and above all to engage in his own farming for the sustenance of his own household. It is the responsibility of the *or u ya* (compound head) to see to the allocation of land to every young man who founds his own family in order that he might fulfill the responsibilities of fending for his new household especially to hoe a farm for his wife. As Bohannan (1953:50) further observes, this is founded on the fact that,

> Every married woman in Tivland has a right to a farm sufficient to feed herself and her dependents; it is the obligation of her husband to provide it and to perform, oversee, the heavy work on it

This customary obligation falls on the *or u ya* because all portions of land of the compound are his; as such he allocates them to the males in the jurisdiction of his compound.

"It is considered the duty of the compound head to see that the men of his compound have sufficient land" (Bohannan, 1953:50). Every 9 out of 10 Ukum men interviewed on this subject submitted that they get their portions of farmland by virtue of membership in their family and compound. This seems to be customarily normative in Tivland as a whole.

As a compound head of a *Bom-Mbaterem* village of Ukumland (in concert with other seven respondents) stated,

> In Ukum, as in all Tivland, land is owned by the oldest man of the compound. As long as he is alive, he remains the owner of all portions of land that belong to the compound: he exercises full authority over them; apportions to his sons their annual farming plots; grants each of them some plot to set up his own hut especially when he marries and sets up his own household within the compound. In some cases a father shares out his land among his male children while still alive; whatever plots each gets become his permanently. If the family head dies the responsibility of land control and management falls on his oldest son (Fieldnotes: September 14, 2013)

In traditional Nigeria, according to Fabiyi (2011:548),

> Land is mainly communally owned with limited cases of family and individual ownership. Access to land is ascriptive, based mainly on inheritance system. The inheritance system is patrilineal and land may be divided per capita among the male heirs or according to the number of wives with male issues [….]

When this customary practice of land acquisition and holdings as is found in Ukum-Tivland is compared with what obtains in other rural parts of Nigeria and SSA, very strong similarities emerge making room, however, for differences created by heterogeneity45 among peoples. For example, Forde and Scott (1946:193) found that among other Nigerian communities, "Farming is organized and directed by the head of each compound which contains the households of several kinsmen." Among the Igbo of Southeast Nigeria it is also found that membership in a lineage confers right to land on members of that lineage hinging, above all, on

45 *Heterogeneity*—as against homogeneity—is a word that signifies diversity. A classroom consisting of people from different places and cultural backgrounds and a city like New York populated by people from all parts of the world be considered having the quality of heterogeneity and so is a said to be heterogeneous. The prefix "hetero" means other or different, whereas the prefix "homo" means the same.

two customary canons, first, that "Land ultimately belongs to the lineage and cannot be alienated from it"46, and second, that "No member of the lineage is without land"47 (Uchendu, 1965:22). In a similar way, Forde's *Yako Studies* (1964:16, 17) documents that among the Umor—a rural, agrarian community of Cross River State, Nigeria—rights to farmland are conferred on men through their patrilineal kin groups. As such, in Umor of Yako, "A man first takes up farmland when he marries: that is, when he first brings a wife to live with him in an independent household" (Forde, 1964:19). Forde and Scott (1946) found that what obtains among the Yako of Cross River region shares traditional similarity with the practice of land rights and holding as were found among the Ozuitem people of Igboland—though with understandable differences. At Ozuitem, as in Umor,

> […] most of the farmland at any one time is controlled by a number of groups of kinsmen whose members have inherited the usufruct of particular tracks of Ozuitem land […], the usufruct of such land, which appears to form the greater and more valuable part of farmlands, never passes to the men of a younger generation until the last of the older generation has died (Forde and Scott, 1946:64-5)

In many other parts of SSA this customary mechanism of having access to land also obtains even if with some local differences. Paaga (2013) and Kasanga (2001), for example, document that in Ghana, there are the allodial title48 holders who are only customary trustees who hold the land on behalf of the whole community. They are assisted by a council of elders—

46 Uchendu (1965:22) however adds a qualifying note of importance to the effect that the statement that land belongs to the lineage to which one belongs is "[…] a statement of ideology rather than of fact" [since] "the Igbo have institutionalized ways of alienating land" without straining traditional laws.

47 As a follow-up explanatory note, Uchendu (1965:22) adds that the customary principle that no every member of a lineage gets land by entitlement has logically and invariable created yet another bottleneck, namely, that of the fragmentation of land—to guarantee that no lineage member is left out in the apportioning of land. As we shall see, the impact of land fragmentation in SSA is one of the areas we set out to explore in this chapter.

48 Allodial title constitutes ownership of real property (land, buildings and fixtures) that is independent of any superior landlords. Allodial title is related to the concept of land held "in allodium", or land ownership by occupancy and defense of real land

lately described as land allocation committees—whose work include assisting the customary trustees in all matters pertaining to land administration including allocation of land to strangers and the settlement of land disputes (Paaga, 2013:264).

According to Cousins (2008:110), the communal land right system obtainable in many parts of traditional Africa is rooted in the political and social embeddedness of land rights. Cousins (2008) further sketches a picture of pre-colonial land tenure, when land tenure was both communal and individual practiced as a system of complementary interests held simultaneously until it was changed by colonial rule. Plessis (2010) digs into the customary underpinnings of traditional land tenure system in Africa. Honing in on the South African experience Plessis (2010:6) writes:

> […] African indigenous law in property was more concerned with people's obligations towards each other in respect of property, than with the rights of people in property. The relationships between people were more important than individual's ability to assert his or her interest in property against the world. Entitlements to property are more in the form of obligations resulting from family relationships than a means to exclude people from the use of certain property. Property can thus be said to be 'embedded' in social relationships rather than in an individual's claim over private property.

This system of land ownership and control with its characteristic communal structure and the ascriptive egalitarianism marking entitlement to and use of land seems to be a phenomenon common in traditional communities across Africa and other parts of the world. As FAO land tenure studies (2002:16) put it,

> Access to land for the rural poor is often based on custom. Customary rights to land in indigenous societies, for example, are usually created following their traditions and through the ways in which community leaders assign land use rights to the community members. These rights of access may have their origin in the use of land over a long period. They are often rights developed by ancestral occupation and by the use of land by ancestral societies. In such cases, it is through the act of original clearance of the land and settlement by ancestors that rights are claimed.

It should be recalled, however, that what has been termed "communal" in matters of land ownership in many African communities was a diplomatic colonial policy-driven invention. As Adams et al (1999:7) document,

> Many of the areas referred to as 'communal' were deliberately created to further colonial policies. They were intended to serve as reservoirs for cheap migratory labour. People were forcibly moved to the 'bantustans' without reference to the wishes of the established inhabitants.

The legacy left behind by this balkanization of communities and regions of African significantly accounts for a wide range of conflicts and dividing issues in present-day Sub-Saharan Africa (Adams et al, 1999:10) on the one hand, and also makes relevant, as has been accounted for by Paaga (2013:263), why land disputes remain a major hindrance to land use and tenure security in most parts of Ghana—as in many other parts of SSA.

6.3 *Field Data and Analysis: Impact of Land on Agricultural Development in Ukum-Nigeria*

Two relatively distant communities in Ukumland—*Mbaterem* and *Mbatian*—were selected for tracking how land and the social organization related issues surrounding it affect agricultural development in order to compare findings from there with what obtains in other parts of Nigeria and SSA at large. The assumption is that by simultaneously testing the same set of survey questions in the two communities the study would get more informed on the impact of land on Nigerian-SSA farming populations. Below is the set of questions applied in the two areas, which is followed by tables and charts built from data from the two Ukum communities.

Table 6.1: *Questions for Tracking the Impact of Land on Agricultural Development in Ukumland*

1/A: Do you get farmland only by membership in your compound?
2/B: Do you acquire farmland by lease?
3/C: Do you acquire farmland by purchase?
4/D: Does your membership in an age grade help you get farmland?
5/E: Do you get farmland from your maternal uncles?
6/F: Does your affiliation with a religious group help you get land?
7/G: Do you get farmland from friends?
8/H: Is your family size greater than 5 or less than 5?
9/I: How many hectares do you cover every year?

10/J: As men in your compound increase does farmland size decrease?
11/K: As farmland size decreases does your yearly farm produce fall?
12/L: As farmland size falls do you farm on your plots almost every year?
13/M: Does farming on your plots almost every year lead to increase in farm yield?

Table 6.2: *The Impact of Land on Agricultural Development in Mbaterem of Ukumland*

Questions	**Yes**	**No**	**Declined**
A	18	2	0
B	15	4	1
C	1	19	0
D	2	17	1
E	2	16	2
F	3	16	1
G	3	15	2
H	16	3	1
I	5	13	2
J	17	2	1
K	19	0	1
L	18	1	1
M	0	20	0

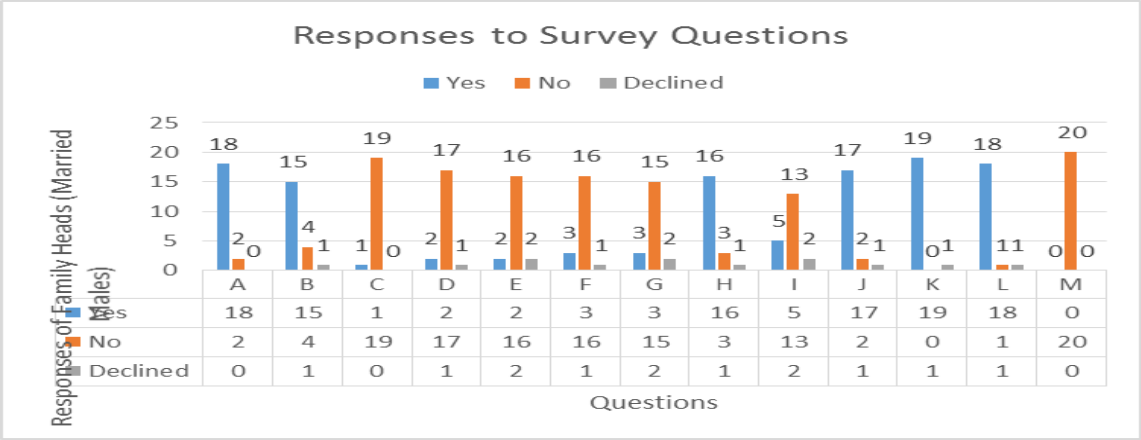


Chart 6.1: Tracking the Impact of Land on Agricultural Development in Mbaterem-Ukumland (Key: A through M represent Questions 1 through 13)

From data displayed in Table 6.2 and the corresponding chart, it is clear that Mbaterem-Ukum farmers' experiences on sources and sizes of farmland speak volumes to the concerns of this chapter and the study as a whole. An overwhelming fraction of farmers (18/20) acquire

farmland by virtue of membership in the families and compounds into which they are born. On the other hand, 15/20 farmers get farmland by leasing from others—usually a two-year tenure that is usufruct in character. Whereas only 1 out of every 20 farmers is able to purchase farmlands, only 2 out of every 20 farmers are able to acquire additional portions of farmland through membership in age grades. Similarly, very few farmers (2/20) are able to get land from their maternal uncles. Membership in religious groups does not make much difference either: only 3 out of 20 farmers get any additional farmland through this; the same number (3/20) get such help through friends. As many as 16 Mbaterem-Ukum farmer-participants indicated having family size with as many as greater than 5 persons; the impact of this gets worse with majority of them (17/20) having farmlands that are not more 2-3 hectares, which is not commensurate to needed food output in light of their target production capacity. 17 out of every 20 farmers indicated that their farmland size shrinks with increase in population; on the other hand, 19/20 farmer-respondents indicated that with fall in farmland size farmers also experience decrease in total output. These two forces in concert make 18/20 farmers repeat cultivating the same plots of farmland almost every year. As would be expected, all 20 participants reported that shortage in farmland size, which makes farmers tend to farm on the same plot every year, does not result in increase in total farm output.

On applying the same set of questions to a set of farmers from the Mbatian community of Ukumland, very closely similar responses were gathered as the table and chart below show.

Table 6.3: *The Impact of Land on Agricultural Development in Mbatian of Ukumland*

Question	Yes	No	Declined
A	17	3	0
B	16	4	1
C	0	20	0
D	3	15	2
E	0	18	2
F	2	15	3
G	2	13	5
H	18	2	0
I	15	4	1
J	19	1	0
K	19	0	1
L	20	1	0
M	0	19	1

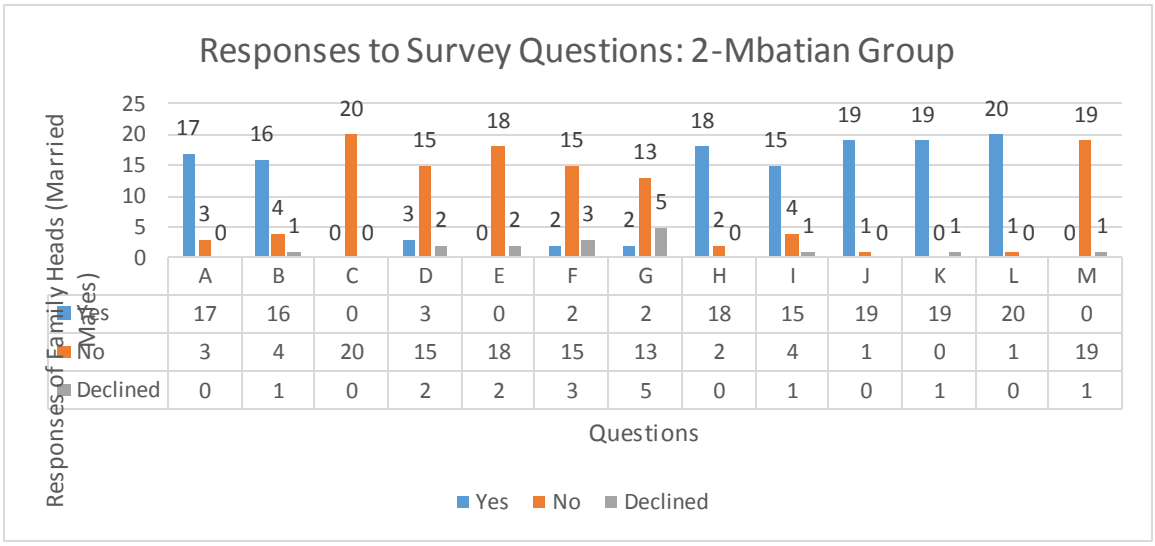


Chart 6.2: Tracking the Impact of Land on Agricultural Development in Mbatian-Ukumland (Key: A through M represent Questions 1 through 13)

From both sites, the study found that the phenomenon of land leasing among farmers is accounted for by growth in (men) population in the compounds and the corresponding effect of continually shrinking of farmland size. This becomes more critical as instances of land-leasing have become even rarer (Fieldnotes: July 28, 2013; August 17, 2015), this being one of the effects of the monetary value attached to land since the advent of the beniseed era of cash economy in Ukum-Tivland measured against the precolonial experience when Tiv engaged in land cultivation only for subsistence purposes (Bohannan, 1968:6). There are few cases where

men hoe portions of land belonging to their maternal kinsmen which, for lack of meaningful frequency do not strike a note and so do not gain as much traction in this study.

As was represented above, only about 1 out of every 20 farmers acquire (additional) farmland by purchase. This paucity of number is explained by two social facts: the first being that these farmers are poor to afford the price of land and therefore underscores how the social status and or economic power (or both) of Ukum-Nigerian farmers militate against the desire to improve their production capacity; the second reason is that the sale of land in Ukum-Tivland is abhorred by the custom of the land. So that, even if there were farmers financially strong enough to purchase farmlands, this customary norm remains a snag to realizing their ambition.

However, the statement to the effect that people of Ukum and all Tiv do not sell land calls for some qualifying ethnographic observation. For, at present, the issue of selling or not selling of land varies from place to place. For example, in the hinterland areas where people are focused almost exclusively on the use of land only for farming—for domestic consumption and for market exchange—this tradition still holds significantly. However, in the Zaki-Biam sub-urban area constituting the epicenter and hub of trade and commerce as well as the point of confluence between indigenes and migrant settlers from all parts of Nigeria and beyond, land has entered the market economy where it is exchanged for money. A significant influence on this social change comes from the fact that some migrant settlers have taken interest in setting up business ventures such as private schools, water bottling factories, bakeries, petrol/gas stations, soap manufacturing firms, cassava processing units, building of personal family houses, poultry farms, guest houses, and residential rentals houses among others. These business investments and their related attractions have led indigenes of the Zaki-Biam area to appreciate the additional cash value of land accruing from outright sales.

On the other hand, that land is not sold in the interior agrarian settlements of Ukum-Tivland does not remove the fact that in those same areas scarcity and shrinking of farmland size also produce another constellation of forces to make land leasing gain greater frequency. This can be seen from the study data: 15/16 out of every 20 Ukum farmers rent farmland which, when juxtaposed with the question on the size of farmland with increase in the number of men at any given time in every compound presents a clearer picture of the impact of population increase on farmland size in Nigeria and many other parts of SSA. In the same vein it was found that as cropland size shrinks farmers tend to compensate for this loss by subjecting their existing plots to continuous cultivation with almost zero fallow periods. This in turn exacerbates the negative results in farm produce: more labor, more time and more capital investment all of which end in the drudgery of diminishing farm output as a result of soil degradation and loss of nutrients.

This part of the inquiry expose even more telling findings: in their bid to make up for losses imposed by binding diminished farmland sizes, Ukum rural farmers intensify intercropping and often make a mix of two or more heavy feeder-crops such as yams and cassava. However, by occasioning competition among intercrops this farming practice quickens the rate of soil nutrients depletion and ultimately cropland impoverishment.

The above observations correlate with the fact that families with more people experience more shortages in food supply and are low in socioeconomics. So that, even with more hands to provide labor for farm work, there is not much to show for it. It was observed to be an on-going experience that brings these factors into one play ground to work against the wellbeing of farmers no less of their communities and the nation at large: 1) large families beget more mouths to be fed in addition to fast growing number of people to share in the family and compound

farmland with resultant reduced farm sizes over time; 2) intensification of available farmlands with reduced or no periods of fallow which yields the overall result of poor harvest; 3) (such) rural farmers are left with little to feed themselves and unable to take care of other needs; 4) with the accompanying characteristic low socioeconomics such families find themselves in the gridlock of inability to sponsor their children in good quality education, which in turn fosters poverty circle in the family. This conspiracy of factors seems to be very much involved in the overall ways land as a factor of agricultural production militates against Ukum-Nigerian farming families notwithstanding state, regional and global efforts to stand up to the assaults of hunger and biting poverty. In many related ways it also slows down the good will and efforts of SSA rural farmers in their bid to effect community development through boosting production. In many ways these problems are tied to the land tenure system practiced; this makes a closer examination of land tenure very necessary.

6.4 *Land Tenure System in Nigeria: An Attempt at a Short History*

Very closely tied to the dynamics of sources of land acquisition and management in Ukum is the institution of land tenure. In many respects how one acquires land for farming—and other purposes—is a function of land tenure in place, land tenure being a social regulatory system. We adopt the FAO (2002:7) definition of land tenure as

> […] the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land. [….] Land tenure is an institution, i.e., rules invented by societies to regulate behavior. Rules of tenure define how property rights to land are to be allocated within societies. They define how access is granted to rights of use, control, and transfer of land, as well as associated responsibilities and restraints. […], land tenure systems determine who can use what resources for how long, and under what conditions.

Thus conceived and contextualized, this leads to the understanding that "Tenure is a social construct that defines relationships between individuals and groups of individuals based on

defined rights and obligations" (UN, 2010; see also ECA, 2004; Bruce, 1986; Moyo, 1995; Shivji *et al.*, 1998).

As would be expected, land tenure system in Nigeria—as with other parts of Africa—lacks in uniformity; there are variations between regions and even among and between communities. These differences in land tenure and in the practices of allocation, use and transfer that go with this social institution stand out even more when considered in the major geographic regions of Northern and Southern Nigeria. These major differences are accounted for, according to Fabiyi (2011:548), by "[…] differences in political experience and administrative policies of the past colonial masters […] who left their imprints on the tenure system."

In *Northern Nigeria* the true position and historical conditions of land tenure were lost in obscurity because of two major historical disturbances: the conquest of the Hausa by the Fulani in 1804 on the one hand, and the conquest of the Fulani by the British in 1902-3. What happened, however, was that the British effectively took over control of the Fulani native population by declaring themselves the overlord of the people's land through the instrument of the "Land and Native Rights Proclamation Act" institutionalized in 1910. The core point of this colonial forceful take-over is that it declared all lands of Northern Nigeria—occupied or unoccupied—to be native land; it thereby imposes on all Northern Nigeria lands the character of communality but only for the purpose of making them totally controllable by the incumbent official (colonial) government.

> All native land, and all rights over the same, are hereby declared to be under the control and subject to the disposition of the governor and shall be held and administered for the governor and shall be held and administered for the use and common benefits of the natives of Northern Nigeria; and no title to occupation and use of any such lands shall be valid without the consent of the governor (see Fabiyi, 2011:549).

Following this absolute power over all lands in Northern Nigeria vested upon the governor, he alone had the powers to grant occupancy rights to Northern Nigerian natives and others; to demand rental from natives and others for use of the land thus granted; and to effect revisions on the rentals payable at intervals of not more than seven years. These conditions meant that all farmers in Northern Nigeria—natives and non-natives—were tenants of the governor.

In *Southern Nigeria*, on the other hand, the land tenure system also lacked in homogeneity due to local sovereignty in land matters. However, there were some common elements identifiable in Southern Nigeria land tenure system. As Hayford (1971:55) writes,

> In the early stages of the native system, upon the acquisition of lands, by conquest or settlement by members of a community, the lands so acquired or settled upon would be apportioned among those worthy of them in the order of merit.

In other words, "The individual use rights are established by individual clearance and use of land, by mixing his labour with the sill and appropriating the land from the state of nature" (Fabiyi, 2011:549). As in the case of Ukum, Ghana and South Africa as among some others African communities, land is the possession of agnatic groups who share many other things in common. Hence Fabiyi (2011:549) accounts that, "In Southern Nigeria, land is the property of the extended family or the community. Land is corporately owned." Oluwasanmi (1966) specifies that, the term community may refer to a family, a clan or village consisting of a number of kindred or lineage groups or families.

6.5 *Land Tenure and its Implications for Agricultural Development in Nigeria*

The foregoing makes the case as to why considerations about land tenure systems are critical in the study of agricultural production, rural development, and the factors affecting them in SSA. This is more so with land tenure being deeply rooted in, and controlled by, the social

organization of the place, which includes the "social, political and economic structures" that regulate life (FAO, 2002:7).

Insights based on the analysis of data in the tables and charts of this chapter strongly suggest that the land tenure system practiced in Ukum—as is rooted in and shaped by their social organization—is not (totally) favorable to agricultural development in Nigerian. It does not support or enhance farmers' struggles to catch up with increased food production required to meet indigenous farmers' needs and the high demand of food in Nigeria. First, it limits the chances of farmers to acquire more needed farmland to boost output: predominantly (male) farmers have access almost only to as much land as they are entitled in their compounds. This is made worse by the fact that only very few Ukum farmers can afford to rent land, which is as a result of the high cost involved and rarity of such plots; fewer still can afford to purchase outrightly farmlands which are rarely available. This two-fold difficulty is rooted in an ancient Tiv tradition whereby land, as we saw earlier, is not sold and hardly rented out—land being the property of the kin-group vested in the compound head (*or u ya*) and so could not be dispensed with (Fieldnotes: September 14, 2014). It is a tradition that dates back to a time when no living Ukum recalls. According to an earlier Tiv anthropologist,

> Land is not property among the Tiv. It cannot be sold—that would be tantamount to selling a genealogical position. It cannot be rented, for one's right to it depends on kinship status and residence (Bohannan, 1968:8)

This limitation imposed on agricultural production by the land tenure in force is further exacerbated by the constant fragmentation of farmlands due to population increase and the pressure it brings upon the spatially fixed available croplands. As our chart shows, less and less farm output is recorded every year because, as the number of people increases—against fixed

arable land—the size to which each male in every compound gets shrinks resulting in continuous fall in farm output.

Many studies have found this to be directly linked to the continuous fall in food production in SSA. For example, Kakwagh, Aderonmu, and Ikwuba (2011) tracked the impacts of land fragmentation on agricultural development in Tivland of Benue, Nigeria, and found among other results that the phenomenon of land fragmentation is rooted in land tenure in Tivland, which in turn encourages partitioning of land based on inheritance; this leads to further and excessive splitting of land into smaller and scattered patches that ultimately end in ineffective use (p.54).

Some scholars have, however, argued in favor of land fragmentation contending that it holds out some merits to farmers. For example, Bentley (1987) represents this group and argues that land fragmentation 1) allows farmers with scattered farmlands to benefit from risk management through the application of multiple eco-zones and the scheduling of crop planting; 2) that it enables farmers to spread out and so reduce risk by following a variety of soils and other micro-climatic, micro-environmental variations; 3) and that it gives farmers the advantage of planting different crops that mature and ripen at different times and so lead to the avoidance of household labor bottlenecks.

Against Bentley's argument favoring land fragmentation, this study found consequences contrary to his study conclusions. Many Ukum interviewees hold that land fragmentation produces an overall negative impact on agricultural development in Nigeria; this it does by constraining agricultural development. As the studies of Shuhao (2005), McPherson (1983), and Simpson (1987) document, this study also found that fragmentation of land increases the overall cost of production; this is because farmlands are small and scattered and so make farmers spend

more money and time on long distances—resources that could otherwise have been saved and more productively applied. The problem of land fragmentation is further exacerbated by the phenomenon of growth in population, which places pressure on land access (CICRED, 2007:9). Day-to-day observations and conversations with respondents came to the same findings of these studies: the problems associated with land fragmentation create and deepen inefficient use of resources; hinders the mechanization of agriculture—individual farmers cling to their small patches of land and refuse to join plots, labor and capital resources with others for mechanization targeting more effective and productive use (Fieldnotes: September 22, 2013).

Furthermore, more intensive interaction with farmers revealed that land fragmentation lends itself to little or no incentives among smallholder farmers whose small and scattered plots give no drive to improve their farming activities; constantly rising feelings of insecurity regarding farmlands as a result of the restrictions and constraints imposed by land tenure practice in force. These findings are corroborated by the studies of Fabiyi (1983), Famoriyo *et al* (1977) and Idowu *et al* (1999). On the other hand, seasonal and permanent out-migration were some other negative impacts found to be associated with land fragmentation in Ukum as in other Nigerian communities. These same reasons make taking land tenure more seriously since "It is multi-dimensional, bringing into play social,, technical, economic, institutional, legal and political aspects that are often ignored but must be taken into account" (FAO, 2002:7).

6.6 *Conclusion: Chapter Summations*

1) Land is a very crucially important resource especially for SSA communities which are primarily and predominantly agricultural.

2) Prior to their encounter with Europe through the forces of colonialism, Ukum-Nigeria as with other SSA communities practiced some levels of food production but mainly for domestic purposes though some quantity of their produce entered the sphere of exchange in markets.

3) Rooted in the instutionalized norms of their social organization, SSA people acquire land for agricultural production mainly by being born into particular to the agnatic groups.

4) This modus operandi determines the source of land the scope of which it also restricts and so limits the chances of many farmers' drive to expand their food production potential.

5) A few people also get cropland through lease and even fewer still through outright purchase.

6) In all these it is easy to see how a social organization regulated land tenure stands against the opportunities of better agricultural development in SSA.

7) Though membership in other social groups sometimes helps; the help realized in matters of cropland is usually minimal and infrequent.

8) The whole situation created by this land tenure practice is that the size of cropland decreases with increase in the number of people (men) in every compound.

9) This produces a corresponding fall in agricultural productivity since the quantity of land available to a farmer determines the quantity of food he produces all things being equal.

10) These two and related hindrances lead farmers to subjecting their available croplands to continuous and excessive cultivation which ends in poor yields due to soil nutrients depletion.

11) This is even worse when farmers practice intercropping for the same the problem: there is too much competition among the intercrops that results in poor results.

12) The situation is more acute among families with more mouths to feed in the face of continually shrinking cropland size.

13) Overall, therefore, SSA rural farmers suffer the assaults of low socioeconomics including and especially food insecurity, poverty, malnutrition, and poor health.

Chapter 7: Labor as a Factor of Agricultural Production in SSA

7.1 *Chapter Overview*

While it is the case that land is a number one prerequisite for agricultural production, it is also true that land is not self-cultivating and not self-managing. It requires human labor in all its senses and ramifications to subject land to food and any other kinds of production, just as it requires human labor—managerial and entrepreneurial—to process the produce therefrom. Premised on that understanding, this chapter is dedicated to the examination of this component and the analysis of data from the field—on how rural farmers of Ukum and other parts of Nigeria and, by extension, other parts of the SSA supply labor as they go to the farm and process produce from their farm including distribution. The chapter explores such related areas as the division of labor in its sex-based practice; the involvement of the family household and the compound in farm labor; the role of age-sets in the generation of farm labor not leaving out how these aspects of social organization have evolved over time in the face of social transformation; the contribution of hired farm labor both from within and outside Ukum; the role of other farm labor related groups; the impact of rural-rural and rural-urban migration on availability and quality of farm labor; the effect of level of education and or literacy on human capital and farm labor; and very importantly, the impact of labor provision on school attendance and literacy level.

By bringing together results from these farm labor related areas our main aim in this chapter is to understand how labor as a factor of production impacts agricultural development in Ukum and other rural parts of Nigeria and SSA. Our analysis pays critical attention especially to how all these affect marginalized target groups like women and the youth in the region. In tracking these phenomena the study worked 40 focus group of participants cutting across single as well as married men and women; single young men and teenagers.

7.2 *Sources of Farm Labor and Its Correlates in Ukum-Nigeria*

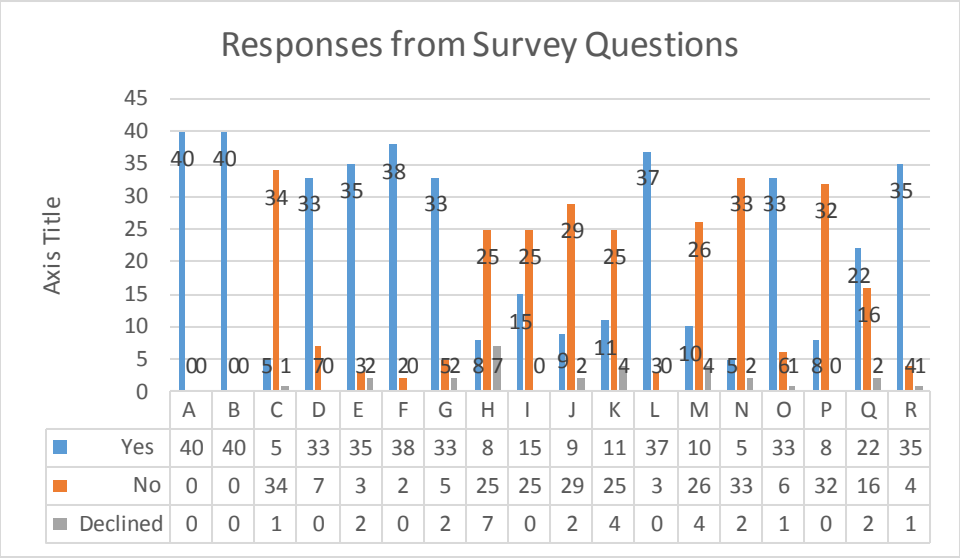
In tracking answers to the following questions direct observation, surveys, key informant interviews and follow-up interviews study techniques were applied to collect data on sources of farm labor and its impact on agricultural development in Nigeria. Data thus gathered are statistically analyzed in sequence.

Question Set 1*: Tracking Sources of Farm Labor and Its Correlates in Ukum-Nigeria*

A: Is farm work done by married men as family heads alone?
B: Does farm work involve the woman of the family?
C: Do men contribute more to farm labor than women?
D: Is it true that women do more than men in farm work?
E: Is it true men are in control of proceeds from farm produce?
F: Are children involved in the family farm work?
G: Does this prevent them from going to school sometimes?
H: Does low level of education negatively impact the quality of farm labor?
I: Are relatives of the man and his wife involved in farm labor generation?
J: Do men use their age-sets for farm work?
K: Do men form other associations to boost farm labor?
L: Do young men of the same compound form farm labor groups?
M: Do women have farm labor groups in the compound?
N: Do men and women form religion-based farm labor groups?
O: Do you hire farm labor in addition to that from family?
P: Does your compound experience migration within Ukum?
Q: Do (young) people move from your compounds to cities?
R: Does movement of people from the compound negatively affect farm labor?

Table 7.1: *Field Data on Sources of Farm Labor and Its Correlates in Ukum-Nigeria*

Questions	Yes	No	Declined
A	40	0	0
B	40	0	0
C	5	34	1
D	33	7	0
E	35	3	2
F	38	2	0
G	33	5	2
H	8	25	7
I	15	25	0
J	9	29	2
K	11	25	4
L	37	3	0
M	10	26	4
N	5	33	2
O	33	6	1
P	8	32	0
Q	22	16	2
R	35	4	1



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Yes	40	40	5	33	35	38	33	8	15	9	11	37	10	5	33	8	22	35
No	0	0	34	7	3	2	5	25	25	29	25	3	26	33	6	32	16	4
Declined	0	0	1	0	2	0	2	7	0	2	4	0	4	2	1	0	2	1

Chart 7.1: *Data on Sources and Impact of Farm Labor on Agricultural Development in Ukum*

7.3 *Field Data Analysis*

Data analysis undertaken here covers aspects earlier indicated as the focus of this chapter; in the course of this different ways farm labor supply interfaces with agricultural development in Ukum and other parts of Nigeria will be pointed out. The analysis draws upon a blend of data from the different techniques applied in this search.

7.3.1 *Sex and Family Based Generation and Division of Labor*

In Ukum every member of the family household participates in all the stages of farm work: from bush clearing through to planting, weeding, harvest, storage, processing and disposal of farm produce in the local markets. It involves a collaboration of men, women, young adults, teenagers, sometimes little children and relatives of the man and the woman. This was the common response of study participants further buttressed by direct observation (Fieldnotes: August 22, 2012; September 15, 2013). Further pressed as to why everybody in the household is involved in farm work usually provokes the response like: "How else do you expect us to

survive since all we do is farming?" rendered by the man weeding with his family in Plate 7A (Fieldnotes: August 29, 2012).

Plate 7A: *A man with his family and sister in-law weeding his yam plot*

Plate 7B: *A woman and her children manually threshing bundles of dry groundnuts in the farm*

On the other hand, Ukum family children of varying ages undertake different activities throughout the farming cycle: older teenagers join their bigger brothers in the making of mounds and ridges; they also participate in the hand-pulling of grasses before mounds-making and crop planting. Their younger siblings help enormously in conveying seedlings from homes to farms, produce from farms to homes and from homes to local markets, however, always following the footsteps of their mothers and older siblings. They also play major roles in the cleaning of yams and in the husking and sun-drying of groundnuts.

Nothing brings and holds Ukum family members into one unit of collaboration as farm work and the generation of its prerequisite labor to make it a reality. This is not surprising consideration that in such rural communities where family households still *band* together into agnatic units, farming is basically and predominantly the main source of livelihood which, to a large extent, explains why members of the unit stay together in the same place. As Bohannan (1953:51) rightly put it, "Farming is said by all Tiv to be their "great work" [….]"

However, while everybody in Ukum-Nigerian household contributes to the labor that produces food—domestic consumption and market exchange purposes—it is also true that there are distinct lines of division of labor in farming activities. This pattern was found to be part of the way of life embedded in Ukum network of social relations. For example, except for small children, it is a common practice in Ukum, that once the stage of farmland clearing by hand-pulling (Plate 7C) is completed—in which everybody except for small children is involved—women "step aside" for men to do the hoeing of mounds and ridges for the planting of yams and groundnuts respectively. However, the reverse of this part of the sexual division of labor is found to be the case in some other parts of Nigeria and SSA. For example, in Umor-Yako of Cross River State, "The hoeing of yam hills is traditionally women's work and in ordinary circumstances no Yako men undertake it" (Forde, 1964:22; 1937:29). Men also do the felling of trees and stumping of large roots on farmlands, just as they exclusively conduct every stage involved in the making of burnt bricks for new huts including those for the storage of farm produce (Plate 7D). In these three areas there is a marked differentiation in the amount of work done by men of varying ages: those advanced in age work less whereas younger men do more of these parts of work reserved for men.

Weeding is a part of farm work entirely reserved for women though out of necessity created by excessive work men also join in this as is displayed in Plate 7A above. Harvesting both of yams and groundnuts among others is usually undertaken by women; women also do the work of cleaning of yams and husking of groundnuts. Women also do (more of) the application of fertilizers where this technology is used; in like manner, women also conduct sales of farm produce. So that, while there is collaboration amidst division of labor in Ukum, women do greater part of the work and so invest more time in it; this is very clear from the responses of

both men and women as are displayed in the table and chart guiding data interpretation for this chapter. Bohannan (1953:51) documents that among the Tiv there is both sex-based division of labor and the accompanying complementarity between the sexes (1968:66-9).

Plate 7C: *Farmland clearing by hand-puling done by all in the family*

Plate 7D: *Bricks for new huts done only by men, usually young men*

On the strength of the foregoing, it is not in vain that earlier scholars' documentations on the collaborative character of work structure among "non-literate peoples"[49] recognize that the family, as the primary social unit in every society, must be seen as a co-operative institution (Herskovits, 1952:99-100). This is significantly hinged on the Ukum-Tiv lived experience of the family as "[…] the smallest genealogical unit and may just be a small one; husband and wife,

49 We respond to Herskovits' statement not affirmatively but in the sense of a critical response in which we call his assertion to question. Our contribution and hence our refutation of his use of "non-literate peoples" in relation to the formation of co-operation among the kind of populations his pejorative statement targets is that cooperation has nothing to do literacy—though literacy can enhance its performance and outcomes. We argue instead that co-operation and or collaboration especially in relation to work or labor is a product of rationality or of reason as such, which is common to all peoples from all places and of all historical moments. And it is yet to be established that rationality has anything per se to do with literacy or that both are at par except being a disposition for literate acquisitions or enhancements. Cooperation comes from the felt need of common interest which creates corresponding synergy in pulling resources together—here time, energy, ingenuity—and all it takes to pursue and realize a common goal—in our sense food production for all in the household. Durkheim's (1948) contribution on how common interests creates collaboration and social solidarity comes to mind here and to which we rather lean and appeal in place of Herskovits' restrictive and exclusionary assertion. After all, bees, birds, rodents and other ants especially of the same species cooperate and collaborate in working for their common interests without being literate.

with their children or it may be a large family in which one man has several wives with whom he procreates several children" (Wegh, 2003:125). In addition to the custom-driven need to transmit one's own life to others in order, at the same time, to guarantee continuity of one's lineage and wider community (Tarbo, 1980:56) as is characteristic of the Tiv, the need to generate many hands for farm labor significantly accounts for the phenomena of early marriage (for girls) and polygamy among people of Ukum and other traditional Nigerian communities (Bergsma, 2015:614). This plays out more especially in matters of economic subsistence which, by its nature, taps into, and reflects, the different tiers of economic social relations beginning with the family as the basic social unit. This is why also, "To Tiv, work is a part of producing food directly, in a householding economy, and hence the very substance of family relationships" (Bohannan, 1968:76).

Study data point to the fact that the family setting, in which the division of labor in society (Durkheim, 1984) plays out, is only one of the nodes of *social structure*. We use the concept of social structure in the Radcliff-Brownian and Smithorian sense understood as the "network of actually existing social relations" whose "component units are human beings" and as such include "all social relations of person to person" without excluding "the differentiation of individuals and of classes by their social role" (Radcliffe-Brown, 1965:190-1; Smith, 1992:83). It is within this social structural and or social institutional setting of the family and of the wider social group, part of which the family is, that the social personality or social identity of every individual member stands out. Social personality/identity is understood as "the position occupied by a human being in a social structure" (Radcliff-Brown, 1965:193), which consists also of "the total set of roles and statuses that he or she holds" (Smith, 1992:83).

Field data lead to the understanding that the two sides of the same coin—collaboration and the division of labor among rural farmers of Ukum-Nigeria—are a reflection of the social organization in which they are deeply embedded. Overall, this is rooted in the fact, as Herskovits (1952) puts it, that "In West Africa […] work of all kinds is carried on co-operatively (p.101). It is also within this context that this study aligns with Evans-Pritchard (1940) who, by applying this to the wider village level among the Nuer of East Africa, writes:

> […] the members of various segments of a village have close economic relations and […] all the people of a village have common economic interests, forming a corporation […] in which […] there is much co-operation in labor and sharing of food (p.92)

7.3.2 *Age-sets, Men and Women Based Farm Groups, and Hired Farm Labor*

In addition to farm labor generated by members of family households, there are other Ukum social forms through which this requirement is met; age-sets and other farm labor groups form some of these farm labor blocs. In patrilineal and patrilocal communities such as Ukum, women hardly form labor groups. Almost in a stereotyped way, respondents offer as their explanation the fact that women marry out and into new communities where they have no agnatic filiation except as they are new members of the families and compounds into which they are married. In this they agree with Bohannan's account to the effect that, "Women […] cannot call on ties of kinship as the basis of labour group formation because they live in their husbands' compounds" (Bohannan, 1953:51; 1968:73). This further accounts for why the study data indicate low values on this, specifying further that such groups exist, though infrequently in current moments, among women married into a compound purely for the purpose of rotational labor not paid for in cash money.

Similarly, it was found that labor groups among men and women based on religious affiliation that has nothing necessarily to do with filial agglutination; however, the rate at which

this occurs among individuals purely for exchange of farm labor is very low. Instead, men and women form labor groups—yet maintaining gender boundaries—often to pull hands together to engage in farm work that is exclusively for the interest of their Churches, for example. One of the forms this assumes is that women pull together in small Church groups and hire themselves out as a group to undertake farming activities belonging to other people who pay them. In turn they donate their collective wages to their Faith-Community as a means of paying off levies imposed upon their group by their parishes. In this latter occurrence, members of a Church women's group work together to raise money to off-set levy that otherwise would have been paid individually. Direct observation also corroborated this patterned account given by groups of Church women whom were interviewed on different occasions (Fieldnotes: September 12, 15, and 21, 2014).

Ukum men, especially those of younger age grades, work as members of labor groups. These include age-sets and other farm labor related male associations. While the frequency, and hence the strength, of social ties among members of age-sets and other male labor associations have fallen drastically in present times, cooperation among such groups is still strong and more frequent among young adult males born into the same compound. As Bohannan (1953) documents, "The groups of men who habitually work together are usually men from the same compound, particularly sets of full brothers, though sets of half-brothers often work together" (p.51). Much later Bohannan (1968) adds, "As the link between "brothers" grows more distant (*cha*), the tendency to work together becomes weaker" (p.71). This seems to be explained by the fact that, whether the families are monogamous or polygamous, these young males still feel the tendency to bond together and so hold unto one another by the fact of the social agnatic linkages holding them together in addition to the economic reason of saving their families the

cost of hiring labor from outside. The social fact of young men from the same compound feeling a stronger and hence a more lasting tendency to form farm labor groups seems to be something common among many other parts of Nigeria and SSA. For example, Forde (1964) makes a similar point about Umor:

> Working parties are formed by the group of labour parties constituted within the *yepun*. Each man wanting a party to work on his farm goes to the *kepun50* head bearing a calabash of palm wine and expresses his desire. […] the man whose farm is being cleared provides a mid-day meal of baked yam in the farm. […] an attempt at fair rotation is made by the *kepun* head and the path elders (p.21)

Among the Igbo of Southeast Nigeria, age sets have remained time-tested source of farm labor: each young male forms labor group with some members of his own age grade with whom he rotates labor and in which every member is treated equally in terms of his own time to be accompanied to his parents' farms as he did to theirs. The family of each member whose turn to receive the help of others at the farm provides sufficient food especially in the afternoon; the food is usually served at the farm to sustain the group throughout the remaining hours of the day's work. This customary practice also provides the social cohesion among members of an age grade as they grow into manhood.

Very important a source of farm labor as it is, age-sets (and other male associations) for the purpose of providing farm labor has become less common in Ukum. As it is, the taste of money in the present-day exchange or market economy explains why less and less people are

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50 In Umor village of Cross River State, Nigeria, the term "*kepun*" refers to compound, an equivalent of the Tiv "*ya*" meaning the same thing—compound. The plural form of kepun is *yepun* and refers to a bloc of compounds that are closely related by consanguine relationships so much that they do not intermarry. *Yepun* among the Yako is the equivalent of *Tar* in Ukum-Tivland social milieu—meaning a group of consanguine compounds inhabiting a physically circumscribed space (See Bohannan, 1989:1; Rubingh, 1969:64, 65. It is also the equivalent of the Igbo social institutional article *Umunna*—designating a patrilineage and hence a group of extended compounds including the dead ancestors and living held together by the filial bonds of consanguinity and within which everybody's citizenship—and the entitlements that go with it—are defined and legitimized (Uchendu, 1965:12).

interested in group labor. In other words, the more people develop the capitalist mentality and so dedicate more of their time and labor to the pursuit of their individual material interests the less they are interested in joining with others in labor groups.

7.3.3 *Rural-Rural, Rural-Urban Migration and Agricultural Production in Ukum*

Migration, as the movement of people from one location to another, is caused by many factors including but not limited to conflict, natural disasters, land shortage, famine, search for (better) jobs, the desire to acquire quality education, natural disasters such as earthquakes and drought, to mention but a few. In like manner, migration ripples off many effects including hunger and famine, shortage of labor in the donor families and communities, drastic fall in population of households and of communities, and shortage in food output among others. In its nature migration assumes both rural-rural and rural-urban dimensions; sometimes both occur simultaneously and could also collectively produce the same or closely related effects. As a matter of fact, both are experienced in Ukum, among other Nigerian and SSA communities though in varying magnitudes.

In the case of rural-rural migration in relation to our study site, it is the case that people, especially young adults, move out less from their rural communities to other rural communities since, respondents explain, there is actually nothing different from where they are moving and where they might be heading to (Fieldnotes: August 28, 2013). This means that they do not have any significant motivations to stimulate and sustain such movements. This is more the case in parts of Ukumland where land is still relatively plentiful and so encourages young people to stay at home cultivating their family-inherited croplands, other things being equal.

Survey data and follow-up interview responses reveal that in Ukum, rural-urban migration takes a higher toll of labor movement on families, especially youths. Two factors

explain this: first, in the more populated areas of Ukum, young adults whose family lands have shrunken tend to move to the Zaki-Biam areas where the market and related business activities create attractions for them and thus explain why young adults here move away from their hinterland communities. They move to Zaki-Biam because it is considered the commercial city of Ukum LGA. They also move to Makurdi the capital city of Benue State and to other Nigerian small and mega cities. Second, young people move from other more thickly populated areas of Tivland to Ukum that has more arable land but less population than many other LGAs.

These field data based insights lead to the inference that there is an interrelatedness between farmland size, population pressure and migration on the one hand, and on the other, that these three factors together form a constellation of negative impact on agricultural development in Ukum as in other rural parts of Nigeria and SSA, that is, in so far as they are instrumental to depopulating the donor communities and hence thin down the strength of farm labor in the affected farming donor communities from where they relocate to other areas.

Viewed from another way, when migration is correlated to agricultural production, it seems to be a pattern that migration of people, especially of able bodied youths, whether in its rural-rural or rural-urban occurrences, it produces tremendous negative impact on agricultural production in less developed regions of the world and especially in SSA. For whatever reasons—intra-inter-tribal/community conflicts; population pressure; shrinking of farmland size; soil degradation resulting from excessive cultivation; poor farm output; natural disasters; poverty and its resultant low socioeconomics; search for better education and job opportunities; search for more economically favorable environments among others—it is strongly suggested that migration negatively impacts the availability and quality of farm labor supply and so invariably brings the heavy burden of reduced farm output on rural farming communities. For as more and

more youths are forced away from their communities by any of the aforementioned or related factors, less and less hands are available to undertake and meet the required farm labor to produce adequate output.

Needless to say that when this situation occurs, as it frequently does, the overall effects include reduction in farm productivity and its corresponding increased food insecurity, increased poverty and the reinforcement of poverty cycle. This is more so since people from such families find it very difficult to afford the basic necessities of life just as it continually erodes the chances of school attendance for children and teenagers of affected families (Min-Harris, 2012). So that, against the stand of some scholars have one-sidedly argued, for example, "[…] that rural-urban migration contributes significantly towards the development of […] rural communities through monetary remittances and the involvement of the rural-urban migrants in community development projects" (Ajaero and Onokala, 2013:1); this study however underscores the fact that rural-urban migration increases rural poverty for the same reasons adduced above.

7.3.4 *Hired Farm Labor and Agricultural Production in Ukum-Nigeria*

On another note, this study found that Ukum rural farmers add to their needed farm labor by hiring labor from outside the family household. In Ukum there are two types or sources of paid farm labor: the first is from within Ukum communities. Many Ukum farmers prefer to hire the labor of people, usually youths, from within their communities—because they are cheaper and hence more affordable. Others hire labor from other neighboring communities such as Rafin-Nkada and Ogoja in Taraba and Cross River States respectively because, as the claim goes, "They are more serious and honest being outsiders" (Fieldnotes: April 28, 2012; August 16, 2013). Though the phenomenon of hired labor has gained faster and more complex currency in present times—and so adds to Ukum farmers' overall cost of agricultural production—earlier

ethnographies of Tiv and other rural Nigerian farming populations show that such development already became part of their economic system as early as 1950s to 1960s when Ukum successful traders, for example, began to "[…] hire men to hoe mounds, most often younger brothers, who will take less pay" (Bohannan, 1968:69). Several attempts made to get the calculations of the additional farming cost which hired labor imposes on Ukum farmers eventuated in disappointment: farmers were either hyper suspicious of researcher on the assumption that whatever figures gathered in the study would be reported to the government for increased revenue collection; or they never undertook such calculations to have records to render as account, a reason which proved stronger in most cases. As of the time of this study Ukum young males made each mound at the cost of 20 kobo, which is 20% of 1 Naira—the Nigerian currency. Meanwhile the Naira-Dollar exchange rate was 200 Naira to 1 Dollar as of the time of this particular investigation.

7.3.5 *Level of Education, School Attendance and Quality of Farm Labor in Ukum-Nigeria*

Data in the table and the chart in this chapter indicate that children's involvement in farm work and low level of education differentially yet collectively impact agricultural production; they also negatively affect the socioeconomics of farming households in Ukum. Responses to questions on whether children are involved in generating farm labor in Ukumland are overwhelmingly affirmative: 38 out every 40 Ukum farmers affirm this and often in tones that sound like it could not be otherwise (see Questions F, G and H of Table 7.1 above). Though one-on-one follow-up interviews on this further reinforce the point so strongly, it was surprising, however, that parents, male and female alike, never saw that there are any ways this practice impacts the welfare of their children and the overall situation of their families, both in short and long run. The study also found that many children from the families involved in the study are

yet to complete their elementary education even with many of them at the age range of 14 and 16. A high percentage of Ukum school age children combine schooling with farming and hawking/trading so much that the latter two—farming and trading/hawking—hamper the progress of their education.

Closely related to this is that fact that, in Ukumland school attendance is shockingly very low: at least 2 out of every 10 children are out of school. Among those in school at all, farming activities take precedence over school attendance. On daily basis, especially during the planting and weeding stages of the farming cycle, many children are headed to the farm with their parents and sometimes alone on routes to the farm. A few illustrative vignettes would be helpful here:

> ***Vignette 1***: One fateful day we ran into two young girls who walked pass behind the house where we lived and were armed themselves with weeding hoes and were headed to the farm; this was about 8:30 am. Engaging them in conversation revealed that they were going to weed some part of a farm their mother had contracted for money. Puzzled as to why they should be in the farm instead of at school, I requested they should go back home to get their parents; my intention was to engage them in dialogue so as to find out why this was happening. Against this, the two young sisters returned to the same place using another pathway unknown to me. When I pressed further they finally went home and came back with their mother whose explanation was that she had no money to provide her daughters with school uniform and books. Completing this piece of work was most necessary to meet those needs. Meanwhile, the school term had already rolled into the third week. I walked over to the school opposite where the two girls were supposed to be attending; there I met the headmaster who happened to hail from the same compound with the girls. According to him, "This is what we see here in our community. Children do not want to go to school; their parents prefer to send them to the farm." He further disclosed that the younger of the two girls—who was said to be about 12 years old—had not stepped into any school classroom before. "There are many children like her in our community," the headmaster quickly added. I offered to take up the responsibility of providing them with the said items hoping that my kind intervention would encourage them go to school; on the contrary, the children and their mother turned down my offer and instead preferred to go weeding on the farm (Fieldnotes: 8:30am, April 21, 2012).

Vignette 2: Beside one of the classroom blocs of the very school where I encountered the Headmaster was a group of about thirty school children; they were making ridges with hoes they brought to school from their homes. It was only 9 am and they had hardly done any class business that morning before ending in the same Headmaster's school farm. My field research guide added that these children are usually militarized by their teachers who send them to their own private farms even outside the school compound. Walking away from that scene and about one tenth of a mile from the school we met a man who was said to be a teacher in that school; he was making ridges with a cluster of his class children (Fieldnotes: 9:00am, April 21, 2012).

Vignette 3: On a certain *Kaydo* market day (Wednesday) when schools were in session, I stood at the intersection of three communities. Pretending to be interested in buying the goods some children and their mothers were carrying—yams, tomatoes and peppers—I stopped as many as I could. My findings include: 1) they were all within the age range of 8 and 12 years; 2) at least 1 out of every 5 of those children had not started schooling; 3) each of them covered about two to three miles from home to the market; 4) they do this all the time; 5) communicating with them in simple English was impossible—my research guide helped out in every case; 6) most shockingly, at least 3 out of every 6 mothers of these children never entered school for one day before they got married and never did since then (Fieldnotes: 8:00-10:00am, August 18, 2013).

The metanarratives reduced in the above three vignettes are a reflection of how the involvement of children in farm labor interplay with school attendance and the level of education in Ukumland; they act as a reflection of what obtains in many rural agrarian communities of Nigeria. There are strong indications that this happens in other rural parts of Nigeria and SSA in general. But very crucially, these data show not only how the involvement of children in farm labor retard their progress in school attendance but above all how low school attendance or total lack thereof in turn reproduces poverty cycle in such households. This is the logic of it all: the involvement of school children in farm labor interferes with and, in fact, inhibits their school attendance; their non-attendance of school makes them available for farm labor; however, the labor they supply, like those of their parents, is unskilled farm labor, which follows the pattern

of the same and unimproved farming techniques; these two factors together foster early marriage, especially among the girls; over all, they do the same thing every year for all life without much to show for it, and in this way they and their children remain very poor rural farmers who can hardly take care of their basic needs though they work so very, very hard on their farms.

Many students of society view this from the perspective of child labor which, according to Nwokoro (2011), is the act of "a child engaging in a work to sustain self and or family." While acknowledging that it is a universal experience he writes:

> Though the phenomenon is known to exist in virtually all parts of the world, the prevalence is very high in Sub-Saharan Africa especially in Nigeria, the most populous nation of the world with an estimated population of 170 million people (Nwokoro, 2011:3).

The point of emphasis here is to illustrate how engagement in the supply of economically productive labor—farm labor in the case of this study—constitutes a major and costly distraction from the education of affected children as is mirrored in the examples and above vignettes.

7.3.6 *Farm Labor and Social Solidarity in SSA*

In all its senses—whether from the point of view of the collaboration among members of a family household where the division of labor is usually hierarchical in respect of age; or from the perspective of the sexual division of labor; or from the point of view of age-sets and other male and female farm labor groups; or better still viewed from the lens of any other groups that exist for the purposes of generating labor for farming activities—it is commonly known in Ukum that the collaboration which engineers and sustains the collectivity of action in farming activities facilitates the social solidarity or cohesion in society. Commenting from the bias of its mutual interest centeredness, Radcliff-Brown (1965:199) writes:

> The simplest form of social solidarity is where two persons are both interested in bringing about a certain result and co-operate to that end. When two or more persons have a *common*

interest in an object, that object can be said to have a *social value* for the persons thus associated. This we found to be the very function of the division of labor itself in Ukum since its moral (Radcliff-Brown, 1965:200) and hence its "true function" as against its economic function "[…] is to create between two or more people a feeling of solidarity" (Durkheim, 1984:17).

Following this Durkheimian interpretation of social solidarity being the function of the division of labor in society, it is seen that there are material or economic merits to it. Data from this study strongly point to the conclusion that the function of the division of labor is social solidarity as something deeply moral because it is profoundly meta-empirical, cultural and above all social since, "It is a social fact that can only be thoroughly known through its social effects" (Durkheim, 1984:27). In Ukum the collaboration among members of the family household, between the opposite sexes, among members of age-sets and other social groups that function for the purpose of the harmony of interests, social solidarity is the function of the division of labor. Among these different tiers of the society, the social personalities involved act in concert and so produce the harmony of solidarity keeping individual members as with their common interests active and at a balance (Durkheim, 1984:22-5).

7.4. *Conclusion: Chapter Summations*

Making a harvest of points from our findings in this chapter we put forward the following summations but only in view of their implications for our study. These include:

1) Labor is a pivotally important factor of production: it harnesses land and capital to effect production.

2) In SSA there are both family and sex based types and division of labor.

3) Farm labor is also provided through age-sets, men and women labor groups.

4) In these cases reflected in 2 and 3 above, we find it to be a pattern in SSA that these sources of farm labor are based on and rooted in the social organization of the rural SSA communities.

5) Other ways through which SSA farming communities generate farm labor include religious associations such as Church leagues and hired labor.

6) While hired labor for farm work eases work and enhances the level of productivity, it however increases the overall cost of production especially among poor farming households in SSA.

7) When the strength and quality of farm labor is juxtaposed with migration, it is found that the latter impacts significantly negatively on the former, both in its rural-rural and rural-urban occurrences.

8) However, if migration affects agricultural development rather negatively it is because it reduces the number of able-bodied people available for farming and invariably reduces level of food output.

9) These contribute significantly to the high level of hunger, food insecurity and poverty in SSA.

10) In no small measure, all these slows down and sometimes halt community development among farming communities of the region.

11) It was also found to be the case among many farming households in SSA that farming inhibits school attendance and hence is productive of low level of education.

12) Low level of education and early marriage in addition to the number of children a family household has significantly impact agricultural development in SSA very negatively.

13) Generation and division of farm labor especially because they are institutionalized among SSA communities eventually fosters and reproduces social solidarity to keep families and their kin groups together.

Chapter 8: Capital as a Factor of Agricultural Production in SSA

8.1 *Chapter Overview*

The first and second parts of this section examined the place in and impact of land and labor on agricultural production in Ukum and other rural parts of Nigeria both of which are pivotal aspects of the people in the economic process of "getting a living" from their "natural environment, or habitat" (Herskovits, 1952:67). This investigation would be incomplete if it failed to accord some place to the role and impact of capital as a factor of agricultural production on farmers in the region. Exploring this aspect and integrating it into the overall focus of this study is the business of this chapter. For, even if a farmer has land and the prerequisite labor to work it for agricultural production purposes, there is still the irreplaceable need for capital to help these other two factors actuate production. The term capital is used here to refer not only to money as a means of exchange and determinant of value but also to include all other inputs which are involved in making agricultural production a reality. Used in this inclusive sense of the term and beyond its specifically Ukum-Nigerian rural farming setting, it refers to the means employed by the farmer in the process of production of crops, that is, the factors that are usually traditionally classified as capital resources. Borrowing from Oluwasanmi (1966:79), "They are defined here to include farm machinery and implements, processing equipment, farm-houses, irrigation systems, and other concrete forms of assets on the farm."

Funds in the form of money are required to pay for land leasing (where this applies), farmland clearing, seed planting, paying for weeding and fertilizer application labor, for example. In the same manner money is most necessary for the purchase of seeds and seedlings, fertilizers, insecticides, to pay for new farm tools and for the adoption of improved related

technological innovations to boost production. On the other hand, farmers need money to move their produce to markets and sometimes from their homes to farms and vice versa.

It is in the light of these and related facts that this chapter is dedicated to exploring such concerns as: how Nigerian rural farmers come by the funds they need to undertake agricultural production; if they are totally or partly self-funded; if they are totally or partly funded by the government of their lands; if they get funding assistance from financial institutions and large scale money lenders; if farmers form or join social clubs, age-sets and other associations for the purpose of getting help to fund their work; what role, if any, religious groups play to the same effect; whether farmers get financial help from individual and or group savings; and if there are other ways and means through which farmers raise funds to meet their production targets. These are some of the areas that provide the lens through which this chapter proceeds in data collection.

Analysis of data gathered from the field would be further appraised in the light of extant literature on how Ukum-Nigerian rural farmers struggle with capital and related inputs on the one hand, and how the availability or lack thereof of farming capital impacts the economics of agricultural development in the area, on the other. Overall, this chapter is dedicated to exploring how these aspects of funding shape and impact agricultural production in the area especially focusing more on what might constitute the overarching pillar-problem for farmers in this regard. In the end, however, that chapter aims to find better ways—especially policy measures—for better funding of rural agricultural development in Nigeria.

8.2 *Sources of Capital for Agricultural Production among Ukum-Nigerian Farmers*

By depending heavily on direct observation, individual and group interviews on the one hand, and by polling responses from 50 farmer-participants selected from the *Mbatian*

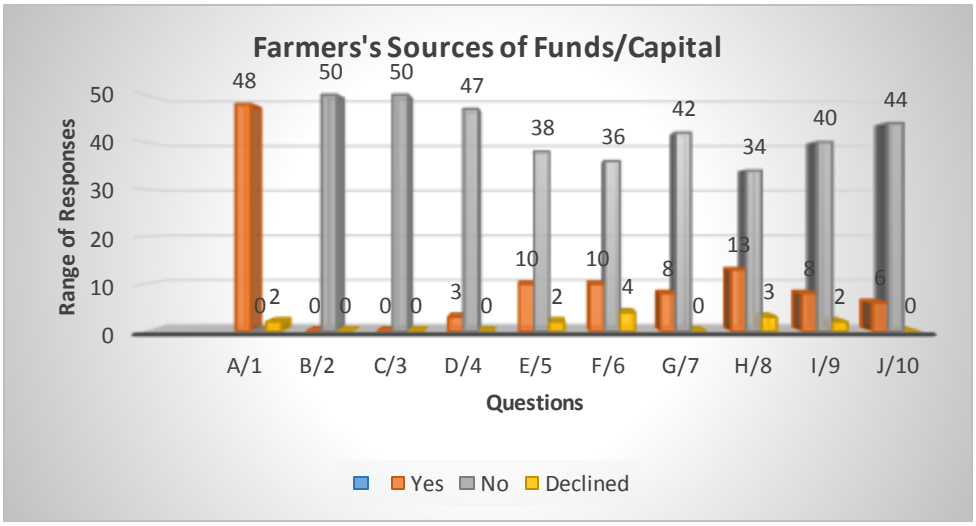
and *Mbaterem* communities of Ukumland on the other, data were collected. The simple questions used to facilitate this stage of the study are contained in the box below.

Question Set 8.1: *10 Questions used for Ukum-Nigerian Farmers*

A/1: Do you totally fund your farm projects?
B/2: Do you get funds from the government?
C/3: Do you get loans from Banks?
D/4: Do you get loans from private lenders?
E/5: Do you get funds from social clubs?
F/6: Do you get funds from kin-based clubs?
G/7: Do you get funds from age-sets?
H/8: Do you get funds from religious groups?
I/9: Do you get funds from friends?
J/10: Do you get funds from migrants?

Table and Chart 8.1: *Farmers' Responses on Sources of Farm Capital in Ukum*

Question		Yes	No	Declined
A/1		48	0	2
B/2		0	50	0
C/3		0	50	0
D/4		3	47	0
E/5		10	38	2
F/6		10	36	4
G/7		8	42	0
H/8		13	34	3
I/9		8	40	2
J/10		6	44	0



8.3 *Data Analyses 1: Based on the Data in Table 8.1 and Follow-up Interviews*

Analyzing the study data as are displayed in the table and chart (1) above brings us to some wide range of insights on how Ukum-Nigerian come by the funds and related inputs with which they carry out their agricultural production activities. First, data strongly show that Ukum farmers are not funded by the government. Nigerian rural farmers do not have access to micro finance resources such as loans from banks; more so interviews revealed that only an infinitesimally insignificant number has bank accounts making it a tight bottleneck for them to attract any benefits from the few banks in their locality even if they so desired or wanted to try. As such, all 50 farmer participants indicated they get no funding assistance from the government and banks.

The chances of getting assistance from private lenders are very lean: only 3 out of 50 farmers admitted having such opportunities. This is so because farmers are very much discouraged from engaging in this kind of borrowing because the stakes are usually too high including the facts that, 1) it is very difficult to find such private lenders who themselves are afraid of losing out when farmers are not able to pay back; 2) the interest rates imposed by such lenders are usually unimaginably high for poor rural farmers; 3) some of such few lenders—where and when they are found within the reach of farmers—make it a condition that a certain number of hundreds or thousands of tubers of yam of certain sizes, for example, are to be used to pay back loans; 4) this makes it close to impossible for farmers to have much left back after paying back with their farm produce. Overall, therefore, the chances of borrowing from even private lenders are edged out of farmers' array of considerations.

On the other hand, only about 8 to 10 out of 50 farmers admitted getting funding assistance from their social clubs, kin-based associations and age-sets, when and where they

exist for this purpose. In that case, therefore, the amount of financial assistance a farmer gets from the group/s to which she or he belongs is determined by the strength of his or her involvement and above all by his or her financial contributions. Membership in such groups revolves essentially around savings in view of farming activities; as such, each member receives funds in the strength of his or her contributions. Membership in the group also confers borrowing privileges on members in good standing; however, the borrowing also goes with corresponding interest. At the end of the savings session, usually, at the end of the lunar calendar year which, in most of Africa communities usually opens up to the new farming season, all group members get equal share in funds accruing from interests paid by borrowers.

This kind of fund savings club is typified in the case of what the locals of Ukum call "BAM"—a local creolized nomenclatural epithet for the English word Bank. According to the customary ideology of *Bam*, members see the association as a banking of funds for future purposes including and especially farming and general household emergencies. In some cases, however, members of *Bam* clubs form or join this front in order to collectively raise money for merry making as was confirmed by direct observation encounters (Field notes: September 28, 2013; October 16, 2014) when members of *Bam* clubs ended their yearly cycle. On each of these occasions, these people—all men—bought one cow and one pig both of which they slaughtered to entertain themselves together with locally brewed wine and beer. Some good portions of the animals were cooked and eaten there while each member went home with big lumps of fresh meat. The general explanation for this was that this is their own way of being happy and enjoying the fruits of their labor. This seems to be one of the reasons such rural farmers do not progress and fail to lift themselves out of poverty: they work so hard on their farms; they produce a lot of food and related agricultural goods; they, however, do not have

meaningful savings to fall back on and, when they do make savings at all, they expend their funds on merry making and fall back into poverty.

Furthermore, not much of financial help for farming comes from religious groups in our study site: only 13 out of 50 farmers admitted getting some help from their Church groups. In like manner, very little assistance comes from friends (8 out of 50) in the manner of lending and or exchange of money with some other material equivalents. Very shockingly too, nothing meaningful comes from family members who have migrated to cities in search of better opportunities: only 6 out of our 50 respondents said they get financial assistance from their family members outside of home. This could be because those who migrated had low social capital prior to their out-migration and might not have improved on it after their migration from home to cities making their contribution to families back home so insignificant.

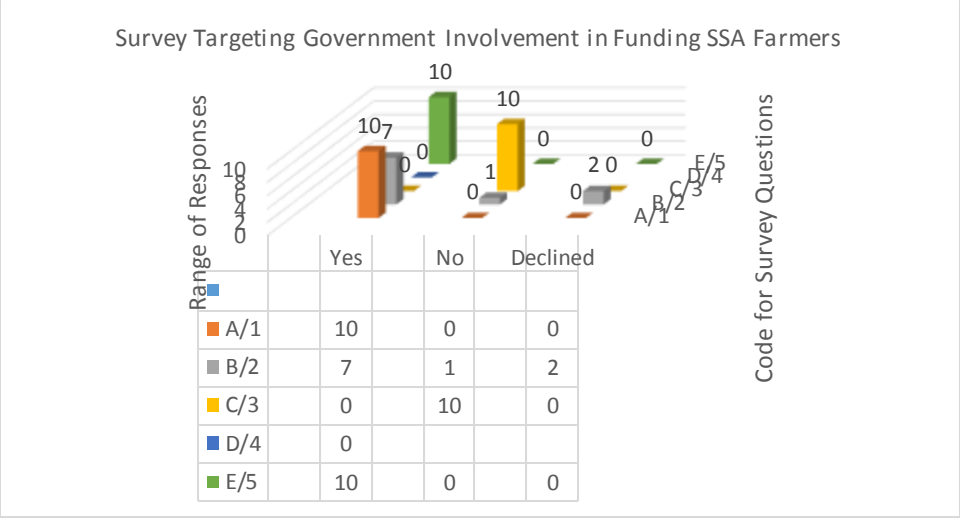
From the foregoing it seems very glaringly clear that the main and sometimes the only source of funds available to farmers comes from their own individual and unassisted efforts. This comes mainly from the proceeds of their farm produce; that is, money realized when sales are directly and immediately made on the one hand, or money they saved from previous year's sales of farm produce but somehow preserved till the next farming season, on the other. This latter source of funds usually comes from few farmers who are handier and shrewder in business and so able to manage their resources better than average ones. In a nutshell, therefore, Ukum-Nigerian farmers are totally self-funded in their agricultural production activities; this is illustrated by the fact that all 50 study respondents and interviewees stated they are totally self-funded and so exclude any assistance from the government, cash or kind.

8.4 *Encountering Government Officials and Non-government Individuals on the Subject*

The study ran into conflictual responses when the following brief survey questions were used to poll responses from government officials and non-government individuals operating around Ukumland. First are the table and chart from government officials' responses.

Question Set 8.2*: Targeting Government Involvement in Funding Ukum-Nigerian Farmers*

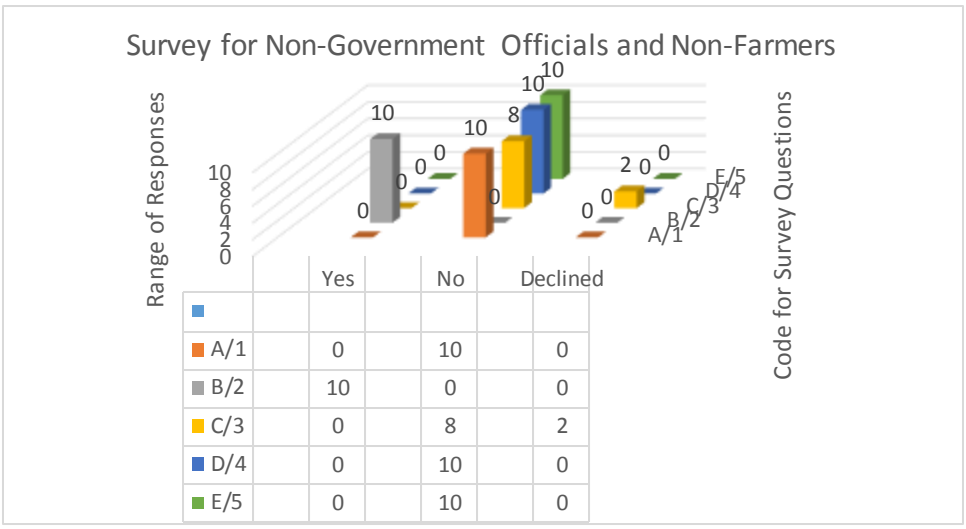
A/1: Does the government fund Ukum farmers?
B/2: Do they depend on themselves for funds?
C/3: Do Ukum farmers get loans from banks?
D/4: Does the government provide subsidies?
E/5: Does the government give them fertilizers?



	Yes	No	Declined
A/1	10	0	0
B/2	7	1	2
C/3	0	10	0
D/4	0		
E/5	10	0	0

Table and Chart 8.2: *Data from Government Officials*

Testing the same set of instruments with non-farmers and non-government officials majority of whom are migrant settlers doing different businesses at Zaki-Biam, widely contrasting data were gathered as are laid out in the following table/chart.



	Yes	No	Declined
A/1	0	10	0
B/2	10	0	0
C/3	0	8	2
D/4	0	10	0
E/5	0	10	0

Table and Chart 8.3: *Data from Non-Government Officials and Non-Farmers*

The essence of this follow-up survey was to field in views from neutral people in order to strike a contrast between responses from Ukum rural farmers on the one hand, and those who represent the official government, on the other. The data in the two tables and charts speak for themselves and so create the ground for some critical comparative analysis here. Insights from the field data displayed in the two tables and charts (8.2 and 8.3) above built from the same set of questions, make a display of sharp differences between reality as is experienced by farmers and the rhetoric of government funding orchestrated by cover-up instruments of official government.

The data in these two tables strongly suggest that Ukum-Nigerian farmers labor alone and rely only on their self-raised funds and without any forms of assistance from the government. For example, whereas all 10 government officials stated that farmers are funded by the government, neutral individuals who do business at the Zaki-Biam market—especially those from whom Ukum farmers purchase farm inputs including fertilizers, insecticides, and herbicides among others—stated otherwise: all 10 neutral respondents denied government officials' response. In this way they wholesomely corroborate the farmers' responses to the

effect that they are entirely self-funded in their agricultural activities. In like manner, all 10 neutral survey respondents reported that the government of the land does not provide farmers with any subsidies, no fertilizers and other farm facilities—contrary to the information from officials at the Benue State Ministry of Agriculture.

During an elaborate interview with a staff of the Benue State Ministry of Agriculture located in Ukum LGA (Fieldnotes: September 4, 2013), it was reported that in the current year of the interview (2013) the State provided 300 bags of fertilizer to each Ward in Ukum LGA, and there 13 such Wards. Compared against farmers' experience it was found that all Ukum LGA farmers bought all their fertilizer needs from the open market; this was confirmed by what Ukum Ward and District Heads stated and further corroborated by responses from Zaki-Biam based traders. Farmers' receipts from purchase of farm inputs further confirmed this study finding.

Equipped with this wide range of information, farmers were engaged in further, extended interviews aimed at finding out from them what constitute their biggest problems in funding their agricultural production projects on the one hand, and in what ways such problems impact them in their efforts to close up the food insecurity and other problems affronting them in the area. Farmers' responses are summed up in the table (8.3) below.

Table 8.3: *Lack of Funds and its Impact on Agricultural Production in Ukum-Nigeria*

Numbers	**Impact of Poverty/Lack of Funds on Rural Nigerian-SSA Farmers**	**Comments**
1	It inhibits the ability of farmers with limited and yearly shrinking croplands obtaining more farmlands through leasing, and invariably limits their production potentials	
2	It handicaps farmers' ability to hire requisite labor for the stages involved in crop production	
3	Even when they see the need and desire to do so, limited resources makes it very difficult, sometimes impossible, for farmers to afford improved seedlings for better yield	

4	It makes the adoption of new and improved farming techniques and equipment farthest removed from farmers	
5	As a result of this constellation of negative effects farmers' produce remains very low in quality compared to international standards	
6	Affording personal means of transportation to facilitate production is a luxury—even among large scale farmers—making them spend much of their income on transportation	
7	With their meager resources farmers find it very difficult to afford (good) medical treatment to ensure good health for continued and sustained food production	
8	Similarly, they are unable to afford basic necessities to enhance the quality of their lives and those of their household members	
9	Negatively impacted by poor resources to improve their production capacity farmers are unable to give their children good, quality education and risk getting ditched in poverty	
10	No less important, farmers also lament their inability to build and live in good houses, a privation they attribute to poverty and poor resources for, and from, their farm work	

In general, the handicaps which poverty imposes on farmers militates against their passionate desire to boost their production capacity which they stated is realizable but only with better and sustainable funding. Poverty and lack of government assistance seem to be the two strongest factors that retard and sometimes inhibit farmers' performance in production. These pieces of information only go to further support what is known not only in Nigeria but across many other parts of SSA. First, SSA farmers are hard hit by poverty, a fact which has been stressed by dozen studies; but their poverty falls within the wider picture of the myriad indices of poverty indicators characterizing the region, which have also been chronicled elsewhere in this study that we do not need to repeat ourselves (see chapter 1 of Section One). SSA farmers are poor and as a result they are unable to afford the requisite capital and related farm inputs to boost agricultural production in light of the continually increasing food shortage ravaging the region. It is a high-stake problem that makes them fall back into poverty. On the other hand, farmers lament lack of government assistance to enhance their performance; the earlier aspect of this chapter make the case for this finding. These study findings will now be

compared with what related studies say on the subject of farmers' experience with funding for their agricultural production, and on its impact on agricultural development in the region. This is our next move in this chapter.

8.5 *Cross-Country and Cross-Regional Comparison: Insights from Related Studies*

Many studies have been conducted tracking the impact of capital and related farm inputs on agricultural production in SSA. Many of these studies recognize that poverty—in its different manifestations—is the biggest problem facing the economics of agricultural development in the region. Poverty (in the region) is rendered here as "[…a state of long-term deprivation of those essential material and non-material attributes of well-being which are considered necessary for decent living" (UNDP, 2008-2009:63). Tus understood, the aim here is to emphasize with Morgan and Solarz (1994), Cockcroft (1991) and Goff (2007) among others that, "Africa's poverty has proved a severe limitation to agricultural development"—though in concert with other factors that constitute the drawbacks.

Many scientific studies have documented, for example, that poverty prevents farmers from adopting new technologies designed to improve agricultural production. So that, while farmers from different parts of SSA have woken up to the consciousness of the advantage of adopting improved farming technologies, they, however, lament their inability to effect it due to lack of funds (Houmy et al, 2013; Meinzen-Dick et al, 2002; Muzari et al, 2012; Doss, 2014).

On the Nigerian scene specifically, lack of funds as a direct reflection of farmers' poverty has been identified by many studies including Awotide et al (2013), Nwachukwu and Onuegbu (2007), Berdegue and Escobar (2001), Daniel, Wilson, and Myers (2005), Garfort, Angell, Archer, and Green (2003), Perkin and Rehmand (1994) as a major factor hindering

farmers' level of improved technology adoption and hence their level of performance in food production. Ogunremi and Oladele (2012) also found that considerations about availability of funds is number one factor which occupy Lagos-Nigerian fish farmers' disposition to adopting new fish farming technologies. They found that among the many who did not adopt, lack of funds stood out as the biggest hindrance (99.1%) followed by the effect of technology application (60.0%), and skill/manpower (59.0%). In a study carried out in Ebonyin State, Southeast of Nigeria, Okereke (2012) found among other things that lack of access to improved farming technologies (95%), high cost of improved technologies (93%), lack of access to weather information (91%), and lack of finance (82%) are the major problems constraining farmers' ability to cope with the challenges of risk management in agricultural production. Of interest is how these studies link Nigerian farmers' inability to procure requisite improved farming technologies to poverty or lack of funds to do so.

Across the region of SSA many studies have burgeoned to demonstrate that failure to adopt modern agricultural production technologies to a large extent explains why farmers produce less than is desirable and therefore experience high levels of poverty, the same poverty which farmers complain prevents them from adopting new and improved farm technologies. This is what Awotide et al (2012) and USAID (1977) stressed by pointing out that poverty and unavailability of required funds among others impose telling inhibitions on farmers' intention to adopt new technologies to boost food production. The logic of these and related studies is that even when, and where, SSA farmers are convinced of the urgent need to queue up in the global line of improved agricultural technology adoption, they still operate far below their production potential because they are unable to access the requisite funds to effect this desire. This has been the consistent finding of many other studies including

Ahishakiye (2011), Norton et al (2010), Beddington (2010), Jama and Pizarro (2008), Jayna et al (2003), Mamudu et al (2012) all of which stress the same point. Exacerbating this condition of SSA farmers is the fact that government policies towards agricultural development have been awfully unfavorable. As was identified in chapter one, agricultural development has failed to pay its way in SSA because the whole post-independence plan for general development failed because it never got started. As Ake (1996:18) put it, "[…] the point is not so much that the development project has failed as that it never got started in the first place." It never got started in the first place because of the fundamental lack of political good will. By political good will here is meant the disposition and willingness to seek the common good by all especially by those who are placed in public offices. It is the desire to seek and bring about the wellbeing of all through the application of democratic principles that foster and enhance the realization of the common good. In SSA, however, political good will lacks not because resources are lacking, not because the populations are not willing to work, not because the common good is far-fetched or outside the realm of the nations; the reason rather is that corruption, self-seeking, embezzlement and diversion of public funds into and for reasons of personal aggrandizement, and above all the gridlock inertia that prevents the rule of law from working place development on hold. All these stand in the way of social and economic progress of the region leaving people and their environments in the throes of poverty and impoverishment. Nigeria typifies this woeful tale.

One of the major ways lack of political good will spreads its virus across the region—and even worse now—is often through the state apparatus of institutionalized systemic unfair policies with which agricultural development is treated. For, despite that it is evidently known that majority of the region's population is rural and depends mostly on agriculture, and that

this is where are found smallholders farmers who "[…] account for 90 percent of the domestic food supply" (Ake, 1996:52), the policies that governments of SSA nations have continually put in place have been unfavorable to agricultural development especially in the rural areas.

Due to bad orientation whereby agricultural development in the region was made to be dependent on government attitudes towards agriculture and the peasantry, much of the funding was also made to be concentrated in the hands of the government. This latter part of the problem also meant ownership of major agricultural enterprises by the government with the corresponding consequences that only limited agricultural capital comes from the private sector. A major reason for laying this kind of foundation in the past many decades lies in a misguided ideological assumption of what constitutes agricultural development and its contribution to national economy:

> Many governments have concentrated their attention on agricultural exports, easier to tax than production for the home market and in several countries the leading foreign currency earner. Export crop production has been held to have economic and social drawbacks affecting income distribution, food security and the environment, but has made significant contributions to rural incomes and national economic growth with production values per hectare many times those of basic food staples. It has also made some contribution to food security by earning the foreign exchange needed to pay either for food imports or for the inputs needed to increase domestic food production (Morgan and Solarz (1994:64; Maxwell, 1988)

It was only the decline in export crops experienced by many nations of Africa in the 1970s and 1980s that seemed to have discouraged this kind of policy orientation against agricultural production for domestic use (Riddell and Cockcroft, 1991).

As has been documented by Morgan and Solarz (1994), the only experience of success in peasant investment in commercial agriculture in the region were mainly cases where there were significant commercial promotion by government marketing agencies or by large trading firms, which sometimes went with some additional support in the form of seed or plant stock supply, professional agricultural advice and subsidized production resources. Such unique

cases whereby government promotion of smallholder investments and settlement schemes aimed at creating larger and more profitable smallholdings are typified in the Kenyan experience as was found by Clayton (1964), King (1977) and Taylor (1969). In the Nigerian and Ghanaian experiences, it needs be noted that export firms worked harder to promote commercial production of export crops often by introducing retailing networks in the areas of their interest. This was a strategy aimed at creating incentives to produce cash crops, of course to the detriment of food crops for domestic consumption; however, it was found that in many cases the incentives were too poor for smallholder farmers lacking capital and improved tools and able to access only poorly-developed produce markets (Mittendorf, 1988; Morgan and Solarz, 1994).

In these and other ways many SSA governments not only discouraged but also neglected smallholder farmers including putting in place policies that were very harmful to agricultural development in the region. Such facts are captured in the fact that governments of these nations bureaucratically created gridlock constraints on agricultural development in many other ways including 1) deliberate policy targeting the concentration of most resources in non-agricultural activity regarded as more profitable or having better growth prospects (Morgan and Solarz, 1994; Ake, 1996); 2) very drastically lowering the percentage of agriculture sector share in total expenditure: 7.4 per cent of total expenditure in 1987—against the fact that the agriculture sector contributed 33 per cent of GDP, 79 per cent of female employment and 66 per cent of male employment in the same year (World Bank, 1989b; UNDP and World Bank, 1992); 3) by the taxation of commercial agriculture paying no regard to the effects of given levels of taxation on production (Morgan and Solarz, 1994); 4) the manipulation of exchange rate to keep imported goods' prices low, but to the detriment of

agricultural exports (Morgan and Solarz, 1994); 5) in some countries total neglect of agriculture (FAO, 1992; Ake, 1996); 6) either by refusal or inability to fund agricultural research and development (Lipton, 1985).

Furthermore, Crook (1988) and Ake (1996), strongly suggest that these policy postures were maintained against agricultural development in SSA in those pioneering post-colonial decades in three distinct but related ways which, however, agree with the earlier points. The three reasons include: 1) that the state systematically and 'rationally' pursued policies generally harmful to agriculture; 2) that the state bureaucracy was ignorant about agriculture, incompetent and corrupt; and 3) that the state was over-ambitious with managerial competence inadequate for such tasks as marketing export crops, delivering inputs or administering prices. These insights, no doubt, inform such conclusions as reached by Morgan and Solarz (1994:65):

> It is not without relevance that few governments have sought to promote agricultural services or agricultural education or to change the popular image or farming as an activity associated with rural backwardness and poverty.

Viewed from another perspective that further highlights and contributes to the on-going conversation on how governments of SSA maintained unfavorable policies against agricultural development, Cleave (1992) argues that some of the phenomena discussed above have been summarized as "urban bias"[51] in development. Our study findings agree with Cleave's (1992), that there is, no doubt, some rich evidence of urban bias in development

51 "Urban bias" refers to a political economy argument according to which economic development is hampered by the pressure of groups who, by their central location in urban areas, influence government's development priorities in favor of urban settings and to the neglect of rural areas. This ideological and or policy tool helps us to appreciate more how deeply entrenched and embedded are the measures that help in creating and maintaining the bi-polarities of rural-urban and periphery-core we see across parts of SSA and the world at large.

where agriculture has provided much of the fiscal base but accorded little investment funding by the public sector. This is without prejudice to the fact that Cleave (1992) also argued that what has been labelled "bias" in West Africa (sometimes) refers to structural change away from dependence on the primary sector towards increased dependence on secondary and tertiary activities, a process he argues is intrinsic to economic development.

8.6 *Conclusion: Chapter Summations*

In concluding this chapter, the following major points are laid out as are informed by findings from field data further buttressed by extant literature on the subject of the chapter.

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1) Capital is very important asset in the whole gamut of production, agricultural and otherwise;

2) Its importance lies in the fact that it actuates the energies of land and labor into productivity;

3) We use the term "capital" in the inclusive sense of the word implying money (funds) and all other assets—machinery, facilities, services—required for sustainable agricultural production;

4) Ukum-Nigerian and other SSA rural farmers are self-funded in agricultural production;

5) Almost all the funds they require and apply in farm work comes from the sales of produce;

6) They get no assistance—cash or kind—from the government all rhetoric notwithstanding;

7) Farmers have no access to credit facilities from private firms and when they do the stakes are usually too high and discouraging;

8) Some farmers get however insignificant financial support from membership in other groups such as Church leagues and social clubs;

9) Some farmers join savings associations but expend big chunks of it on merry making;

10) Those who migrate to cities do not contribute much to their families' farming funds because their before-and-after-migration social capital and socioeconomics are low;

11) Overall, then, it was found that SSA farmers are poor to effect boosted food production;

12) For the same reason of poverty, they are unable to afford all it takes to increase production;

13) As such they are unable to adopt improved technologies and seeds to increase production;

14) For the same reason, they are ill-equipped to meet international market competition; and

15) All these are a result of government policies that are unfavorable to the agriculture sector.

SECTION FOUR: THE STATE AND AGRICULTURAL DEV. IN NIGERIA

Chapter 9: Farming Tools and Techniques in Ukumland: Before and After Colonialism

9.1 *Chapter Overview*

Prior to its encounter with European colonial forces regions of SSA were engaged in the enterprise of food production; this is in keeping with the historical fact that people across the globe and for all historical moments have always known how to interact with their natural environment and with whatever tools and skills at their disposal as they struggle to make a living. This is true also of the stage of human society when foraging was the *modus operandi* of being in the world. "Thus the subsistence strategy and the environment interact to create a category of resources that are vital to the group's survival—their strategic resources" (Hunter and Whitten, 1976:238). The domestication of animals and plants, which followed the invention of agriculture, that is, the cultivation of organisms (plants and animals) found in man's natural environment, has remained one of the most important ways through which humans have continually interacted and interfered with their natural environment. In many and various ways scholars have confirmed that,

> Throughout the ages, man has been dependent on the environment and tried either to modify it to suit his needs or adapted his techniques to fulfil his requirements within the restricted opportunities (Mortazavi and Negari, 2010:7)

Many scientific studies including Raikes (1983), Tosi (1969), Lamberg-Karlovsky (1997), Fuller and Boivin (2002), Tharpa (1993), Mortazavi (2004) among others have demonstrated that through this on-going man-environment interactive encounter, humans have very irreversibly shaped and reshaped both the physiognomic and ecological conditions of their world and have in turn adjusted and adapted to it and thus shaped by it. The same process has been found to be responsible for the production of Civilizations of the Millennia of history. More

fundamental to this argument, however, is the point that "Food is so integral to human wellbeing" (Foresight, 2011), and more so because, as the United Nations Food Summit (1996) rightly observed, "Everything depends on eating and eating nutritiously: the ability to walk, to talk and smile, to go to school, to enjoy good health. There is hardly anything more basic to life than eating" (p. 97/3) understood in the sense of food.

At the early stages of their history populations of Africa—like other aboriginal, pre-colonial, pre-industrial, and pre-modern populations—have always engaged in food production purely for purposes of domestic consumption, which sometimes co-exists with foraging (NEPAD, 2014). This method of economic life called "subsistence economy" (Bohannan, 1968:6) has undergone irreversible changes especially after the region was dragged into cash-crop economy during and after the colonial extractive penetration of Africa (Okere and Njoku, 2004). Inikori (2013:1) recalls that "[…] subsistence agriculture was overwhelmingly dominant on the eve of European colonial rule."52 The way and tenacious manner with which this has been represented by some economic historians have, however, precipitated a model of imagination to the effect that pre-colonial African communities did not practice any kinds of market exchange before their encounter with Europe. The works of Phillip D. Curtin (1975) and Claude Meillassoux (1971) provide evidences that outrightly demythologize this imaginary picture of the African world. Curtin (1975:197), for example, argues:

> Perhaps the most durable of all myths about precolonial Africa is the belief that it contained myriad, isolated economic units—'subsistence economies,'—where the village group if not each individual family actually produced all it consumed. The myth survived partly because former economies were more self-sufficient than their present-day successors, but it was even more

52 The obvious historical side to this inclusion is that, contrary to erroneous opinions held about this pre-industrial part and moment of Africa as with other parts of the world, pre-colonial African communities had, in fact, exercised the social institution of the market (Uchendu, 1965; Bohannan, 1935, 1968), with the difference lying in the magnitude and manner of its operations compared to present-day nature and function of market in purely market economies.

> useful as an imaginary model of production without exchange beyond the household.… Senegambia, where the (sahel) of the desert meets the shore of the sea, has had a monetized exchange and a network of interconnected markets for centuries.

Continuing with this argument, Curtin (1975) adds that "[…] it is not simply the bias of the sources that makes the Senegambian economy of two hundred years ago appear more market oriented than some other African economies […] It was more market oriented" (p.232).

In line with this logic this chapter sets out to examine the state (and nature) of food production in Ukum (and by extension in other parts of Nigeria and SSA) before its encounter with European colonial forces; what became of this phenomenon after that encounter; what modes and methods of production were used in the past and, by comparison, what techniques of agricultural production are being used at the present moment. The chapter also makes a comparative juxtaposition of the types of farming tools/implements that were used in the past and what are being used in the present practice of agricultural production in the area. Study findings will be cast and analyzed in light of the sustaining breath and background of our inquiry.

Since this study was conducted many decades after Ukum's encounter with Europe and the attendant unstoppable wave of full-blown cash economy that ensued after that encounter, the method of data collection included much of archaeological probing in the form of extensive interviews with old men and women who either experienced that era or were close to it; however, other people of lower age range were also interviewed in order to broaden the scope of views informing study findings. Direct and participant observation data gathering techniques and photo clips also played important roles. Analysis of field data will be carried out with reference to extant literature on this subject.

9.2 *Agricultural Production before, during and after the Colonial Experience in Ukumland*

Sequenced after the stages of the historical development of agricultural production in Ukum-Nigeria, this part of the chapter explores what happened among Ukum rural farming communities regarding especially the systems and tools they used before their contact with European colonialization on the one hand, and what has become of these after that encounter. But these aspects are not explored so much for their sake as it is to know how the systems and tools Ukum-Nigerian farmers currently use impact agricultural production in the region.

9.2.1 *Before Colonial Experience*

Prior to its encounter with British colonialism—in late 1800s and early 1900s—Ukumland interacted with its natural environment and practiced subsistence economy as a means of survival. This truth finds its force in the history of Tiv migration, their eventual settlement in and occupation of the region now geopolitically circumscribed as Tivland where they experienced the irreversible watershed in their style of living with the development of the agricultural instinct (Downes, 1933). Ukum used simple tools at this stage of its entry into agriculture (Fieldnotes: July 29, 2013).

Prior to, and during, this time they survived as foragers, a way of life and economic survival in which "People rely on nature to make their living" including and especially hunting and gathering of "a wide range of plant and animal species." This is not withstanding that this way of being in the world has been on the decline with the spread of modern world systems (Kottak, 2007:108-9). Lee and Daly (1999) recall that this way of living survived long into modern times because food production was not practicable with simple technology—as in Ukum of early times—at least not as much as was desirable at that stage when economic pressure caused by rapid growth in numbers (Gbenda, 2012) unavoidably led to general movement and eventual fission of the original, nascent Tiv group into smaller filial agglutinations (Downes,

1933:4). At this stage of its evolution and migration into peoplehood, the Tiv depended on such wild life crops as the small yam (*mkpal*); another wild yam (*atakpa53*); cocoyam (*imondo*); millet (*agase*); some shrubs called *ayande* and *adzo'ol*; shea-nut (*ichamegh*); wild pawpaw (*hu'ul*); wild honey (*iyough*); and a host of others all of which were gathered by women and hunting parties from the surrounding bushes (Downes, 1933:3)54.

As was recalled by one old narrator—on the history of Ukum-Tivland transition from (semi-) subsistence to cash-crop agricultural economy—when their founding forefather Tiv and his immediate progeny had settled at the place now called Tivland, they were mere hunters and rudimentary farmers. According to him,

> They fashioned earth-tilling implements from timber which they found in their environment. They used hoe made out of wood, everything was wood, not our type that has metal blade. At this time the Whiteman had not yet entered Tivland (Fieldnotes: September 29, 2013).

Downes (1933:3) would later confirm this: "They are said to have farmed a little in terraces on the hills, using a wooden hoe called "ikpe" [….]" All interviewees on this subject submitted that people of Ukum originally engaged in food production for their consumption purposes for which they used simple farming tools like the cutlass and hoe; however, they produced some food items which they exchanged for other items they could not produce but were generated by neighbors. Thus they practiced some kind of exchange and barter trade at this early stage of their history.

9.2.2 *During and After Colonial Encounter*

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53 It is most likely that "Atakpa" as a variety of yam that grew in the wild was what an old male informant referred to when, in explaining the origin of yams in Ukumland, stated that yam first grew in the wild, that is, in the forests, but was discovered by their Tiv forefathers and brought home for domestication (Fieldnotes: September 14, 2012).

54 To put these wild foods in the context and light of their Tiv history, Downes (1933:3) recalls that "These original foods are now always planted when ancestral rites are performed and called "kwagh yan mbakuv" (food of the ancestors);" unfortunately, we observed these rituals are hardly observed any more as a result of the double impact of Western education and more so of the Christian religion.

The introduction and mass production of beniseed in Tivland changed the face of agricultural production in Ukumland. This was associated with the history of the Whiteman's entry into Ukum and all Tivland. An old informant's argument (Fieldnotes: September 29, 2013) is that,

> The Whiteman came into Tivland at the place called Sai in Shitile in the present-day Katsina-Ala LGA. They came as missionaries and brought along with them the Good News of Jesus Christ; it was the NKST church that came then. I saw the first Whiteman who came into Tivland.

With that contact, Ukum and Tivland as a whole began to cultivate beniseed in large, commercial quantities; this, therefore, involved the Tiv in pure monetary exchange with Britain. White men came from England to buy beniseed which they took home and processed into vegetable oil (Fieldnotes: September 29, 2013). Ukum people walked on foot to meet their British buyers at the *Tor Donga* and *Ibi* sea ports both of which are in Taraba State; they also met and bought beniseed from the Tiv around the Katsina-Ala river banks. There were still some remains of the warehouses built by Europeans at the banks of the Katsina-Ala River where they stocked the beniseed they bought from the Tiv before exportation to Europe. It was at this time that Ukum and all Tiv people began to use money as a medium of exchange and measure of value more fully.

There was another reason—a political one indeed—which fostered this trade in beniseed with Europe. According to the aged narrator (Fieldnotes: September 30, 2013),

> The Whiteman made us pay him tax; as such Ukum indigenes needed to get the money to pay tax with. So, the Whiteman made us produce a lot of beniseed which he bought from us at a price he fixed so that we could sell our goods to him and get his money and in turn to pay him tax with it. That was what happened and how we got into beniseed business.

The historical account seems to align with and is readily confirmed by what earlier scholars found in relation to the place of beniseed in the transformation of the economic life of Ukum-Tivland. Bohannan's (1953: 52-3) account is that,

> Tiv grow several cash crops. The most important is beniseed, which yields an edible oil and a rich mash of animal feeding (particularly race-horses). Acreage was increased greatly when European trading firms began to purchase it. Today it is the crop from which Tiv get money for tax, and is sometimes called "tax" (*kpandegh*) rather than food (*yiagh*).

To facilitate this new way of economic transaction among the people, the Whiteman trained some Tiv sons who acted as middle men between the foreigners and indigenes. Their work for the Whiteman included measuring, scaling and recording of the quantities of beniseed that were supplied and bought. The Whiteman also used Ukum-Tiv kindred heads to collect his taxes.

With this new economic system, Ukum and all Tiv got woven into a new way of life accompanied by the taste of money, which in turn made the cultivation of beniseed a competitive enterprise. With this also came new ways and attitudes through which Ukum as all Tiv began to view and handle land. Prior to this new season in the economic life of Ukum, individuals freely gave portions of land to others including total strangers; similarly communities gave large portions of land to other communities occasioned, for example, by war-related displacements. In all this there were no charges of any kind placed for the croplands so given out. But with this new experience made possible by the taste of money all those age-long practices and customs began to die and have not been reclaimed from the death money brought upon them. In place of those practices, new adjustments to land crept in including a two-year tenure of land leasing purely for money; at other places such as the Zaki-Biam commercial area of Ukumland, people began to sell off their portions of land. As the old narrator asserted, "We never did all those things till the Whiteman came into our land" (Fieldnotes: September 30, 2013).

Unfortunately, this new mode of economic adjustment to the Tiv environment did not last too long: the beniseed that lit the light of a new economic system was threatened by a most

unfriendly weed which the Tiv call "*Lisa*" and the Hausa call "*Uta-uta*." Eventually, the beniseed economy in Tivland turned negative as this weed began to choke off the much priced crop. After subjecting large expands of cropland to beniseed cultivation the effort paid very discouraging dividends by yielding disproportionately little output. With this came the eventual death of the beniseed economy in Ukum and Tivland in general. Understandably, this experience diminished and discouraged the interest and vigor of the typical Tiv in growing beniseed.

However, as the beniseed market economy died, it made for the discovery of the high commercial value of yam which hitherto, Ukum cultivated only at low scales. Ukum discovered that yam has both high domestic and commercial value; more so, it was found that yam has longer sustaining duration in the course of the year. Again, as in the case of beniseed, it was outsiders who made Ukum people to scale up the production of yam at the commercial level. First, high demands by the Igbo of Southeast and the Hausa from Northern Nigeria created a very lucrative market for yam. In the same vein, yam has created and sustained business of commercial magnitude at various parts of Ukumland with Zaki-Biam as the biggest of them all.

Plate 9A: ***A heap of hundred yam tubers***. **Plate 9B**: ***Several heaps of yam at Zaki-Biam***

In fact, the history (and expansion) of markets especially of the popular Zaki-Biam market space in Ukumland has been consistently traced back to the birth of trade in yam. While other crops like groundnut have gained prominence in Ukum, it is mostly yam that controls Ukum economy. As a Zaki-Biam (Fieldnotes: July 28, 2012) village head asserts,

> Every other thing that follows up to this only forms part of the history of how yam has created markets at the various local communities in Ukum LGA especially the Zaki-Biam market which has assumed some special spot in the economy of Nigeria

9.3 *Types of Farming in Ukumland: Before and After Colonial Encounter*

Ukum does an agricultural practice that can simply be described as mixed farming divided into crop and animal husbandry, both of which are briefly discussed here.

9.3.1 *Crop Farming in Ukum-Nigeria*

Ukum farmers cultivate many root and cereal crops including yam (iyough), groundnuts (*abum*), guinea corn (*wua*), maize (*ikureke*), beniseed (*ishwa*), millet (*amine*), pepper (*mkem*), tomatoes (*temetu*), soya bean (*suanbin*), rice (*chinkafa*), beans (*alev*), melon (*chegh*), okra (*atuur*), cassava (*logo*), water yam (*agbo*), sweet potato (*atsaka*), cow peas (*abum*) among others. The growing of these crops and the magnitude of their cultivation depend partly on personal taste and choice further shaped by cultural values but also by the prevailing market climate. However, groundnut (*abum*), and above all yam (*iyough*) are the most extensively grown crops every year.

The reason for this preference is that there is wider and more attractive market for them. While traders from Northern Nigeria create ready strong markets for Ukum produced groundnuts, those from the Western region and more Igbo traders from the Southeast of the country provide ever ready and competitive market for Ukum produced yam. Some six reasons account for why these two crops are grown more in Ukum than in other areas: 1) Ukum has more land than many other Tiv communities; 2) Ukum is not as thickly populated as some other parts of Tivland and so

has more arable land to support this kind of extensive cultivation of the two crops; 3) its land is fertile for growing the crops; 4) the crops have ready, competitive markets; 5) they provide greater economic value; and 6) they play more supportive economic role in the family.

Plate 9C: *Truckload of yams belonging to Igbo traders headed to Southeast Nigeria*

Plate 9D: *Groundnut bags head to Zaki-Biam*. Plate 9E: *Groundnuts bags at Zaki-Biam*

Ukum farmers also produce a lot of citrus such as oranges, mangos, guava, pawpaw, pineapple, banana, and cashew. While very few Ukum farmers have developed plantations of these

fruit trees, the greater majority grows them in their open compounds for home consumption and for sales at their markets. They grow vegetables of all kinds on gardens and at their bigger farms.

9.3.2 *Animal Farming in Ukum-Nigeria*

Ukum farmers commonly keep domestic animals. They practice mixed animal husbandry and rear these animals usually for two reasons: for purposes of prestige; and for sales in order to get some money in exchange. The animals Ukum domesticates include cattle which, for reasons of tsetse fly infestation in the region only very few get involved in it (Bohannan, 1968:123; Olusanwanmi, 1966:136-7); goats; sheep; pigs; ducks; fowls (chickens); dogs; cats; and guinea fowls. Except for goats usually (but not always) kept in pens in their owners' compounds—because they are destructive of people's crops and vegetables—the rest of these animals are usually left on free range. A typical example of goats in their animal *tar* (pen) is shown below (Plate 4F).

Plate 9F: *Goats in their pen in a typical Ukum animal husbandry setting*

In addition to confining goats in their pens—for the reason given above—some Ukum also tether them to pegs. Their owners provide them with dry and wet grass and other things such as

barks of cassava and yam as sources of nutrition. Pigs, sheep, and more so chickens are left on free range. While this is the norm everywhere in Ukum, leaving pigs and sheep on free range is more common around market areas; this offers them more feeding chances as they have more to eat from the refuse people dump usually at the back of their homes and businesses.

Plate 9G: *Free range pig at Zaki-Biam market.*

Plate 9H: *A horde of sheep on free range grazing*

Typically, Ukum farmers combine crop and animal divisions of farming in such a way that that they complement each other: the animals feed on some parts of their crops such as the husks of rice and the barks of cassava and yam; they in turn replenish their soil—organically—with the droppings from their animals. An Ukum farmer offered an explanation that is as rational as it is scientific and universally acceptable: "Those of us who do this depend less on fertilizer; we know this is a better way of making our crops do well" (Fieldnotes: August 23, 2012). Regrettably, the quantity of droppings from domestic animals in Ukum is far less commensurate to the areas of land the average Ukum farmer cultivates annually and this is traceable to two reasons: first, and as Oluwasanmi (1966) writes, "Animal husbandry is not integrated with crop husbandry in Nigeria," which links to the second reason, namely, the fact that these animals roam on free range lead to the loss of their droppings at random places with nobody to gather and apply them on farm plots. Besides, not much economic value comes from the animals as their sales in the markets are

infrequent compared to the financial needs of their owners. As a result, very many Ukum farming households do not keep animals except for the chickens found in every family and compound.

9.4 *Farming Systems and Techniques in Ukumland: Past and Present*

In this sub-chapter cropping systems practiced by Ukum-Nigerian farming households are examined but only for the purpose of appraising how they impact agricultural development in the area. The overall aim, however, is to keep track with exploring the main focus of this study. Two main farming systems are identifiable in Ukum as in many other parts of Nigeria—intercropping and sequential cropping—and would be discussed in that order herein.

9.4.*1 Intercropping in Ukumland*

Ukumland practices intercropping also called interplanting. Intercropping is a farming system that was already in place before the entry of Europeans in the region and has been in practice in the tropical and sub-tropical regions of the world (Ibeawuchi, 2007; Papendick et al., 1976; Okigbo, 1978; Kurt, 1984; Dalrymple, 1971). According to Ibeawuchi (2007), Wahua (1982), Ikeorgu (1983), Okigbo (1978), Gomez and Gomez (1986) among others, intercropping, as against sequential cropping55, is the simultaneous growing of two or more crops on the same plot of farmland and in proximity aimed at the promotion of cooperative interaction between and among them. Intercropping seems to be a common practice among other Nigerian and all African farmers (Ibeawuchi, 2007; Ibeawuchi et al., 2007). Forde (1964), for example, found this to be the norm among rural farmers of Yako of Cross Rivers State in Southeastern Nigeria—a Tiv close neighbor.

55 Sequential cropping, which is the growing of two individual crops in sequence during one growing season on the same piece of land (Ibeawuchi, 2007; Ruthernberg, 1971; Andrew and Kassam, 1975) is very much practiced in Ukum. As we shall see in the follow-up sub-chapter, a number of reasons are offered for keeping this faming practice.

With intercropping, one major crop occupies the farm land and a few other less nutrient-taking crops are lined up around it. When a major crop is planted, usually yam, a host of other minor crops and vegetables are planted by the heap sides (Bohannan, 1953:52). These side crops and vegetables include maize, peppers, okra, spinach, green, pumpkin and many others depending on local needs and tastes. The explanation for this practice is that the side crops and vegetables provide farmers with early and sometimes all-year-round sustenance especially as they wait for the maturation of yam, which is their main crop. An additional explanation is that it is a multi-purpose approach to providing all kinds of food stuff for the family especially since all come from one plot. It is claimed that the other reason for practicing intercropping is that it helps farming households to adjust during shocks associated with risk factors such as poor yield of certain crops.

Cassava stems are usually planted beside yam heaps sometime after the yam has gone well into its cycle especially where the owners of the plots know that they would not be following yams up with groundnuts. At harvest time yam tubers are carefully dug up leaving the cassava stands to take over till its own maturation many months after yam is harvested since cassava takes a longer period than yam to mature. Where this is practiced, there usually arises need for later weeding in order to get weeds off the cassava which, in essence, targets reducing the rate of competition over nutrients between cassava and weeds. Though Ukum people are not very keen in cassava, they, however, grow it as a back-up crop to help fight off hunger in the months when yam is exhausted.

9.4.2 *Sequential Cropping in Ukumland*

Ukum also practices sequential or dual cropping on the same plot of land in one farming cycle. This is typified in the case of yam followed by groundnuts on the same plot as we shall see shortly. Though not as popular as yam or groundnuts, Ukum also follows up millet with guinea corn both of which are grain crops. For the same reason they attract less attention from Ukum.

Below, we select two crops—yam and groundnut—to illustrate the practice of sequential cropping in Ukumland as well as the stages and timing of their cultivation in the area as in other parts of the Tiv world. The data in the tables were gathered from interviews and direct observation.

Vignette 9.1: *Yam Production among Ukum Farmers*

	Stages Involved	***Months of the year when each stage of yam growing is done***	***Comments***
1	Farmland Clearing and Heaps Making	August through to November inclusive: Bush clearing including tree felling and stumping immediately followed by heap/mound making	*Some make heaps later*
2	Planting of seeds	January through to May inclusive: Planting of seed yams; shortly after other crops and vegetables such as okra, pepper, maize follow	*Depends on time of rains*
3	Weeding: Phase 1 & fertilizer application	June and July: First phase of weeding and the application of both organic (farmyard) and inorganic manure (fertilizers)	*Ukum applies fertilizers*
4	Weeding: Phase 2	August and September: The time for this is determined by when crops were planted and by the rate of rains before this time of year	
5	Weeding: Phase 3	October to (end of) November: Third phase of weeding in conducted	*Rain-based*
	Harvesting (Phase 1)	August and September: Yam harvesting—this is usually need-driven: 1) scarcity of food; 2) lack of funds to finish the remaining stages of farming till final harvest; 3) lack of funds for other necessities; 4) lack of funds to provide for children going back to school in September	*Regardless of the need farmers get little money from sales*
6	Harvesting (Phase 2)	December through to March inclusive: Final phase of Yam harvest	*Some do later*
7	Cleaning & Sorting	Yam tubers are sorted according to sizes: 1) fat ones for consumption and sales; 2) seed yams for planting next season. Both are cleaned	
8	Storage of fat yam tubers and seedlings	December to as late as August: Storage of yams—done in cool, dry places, usually in round huts made of mud/burnt bricks and thatch roof. Both fat tubers and the seedlings are stored in the huts. Some farmers store seedlings under trees and covered with dry vines from the yam grown the previous farming season.	*Farmers say this provides seedlings with a cool environment till planting*
9	Sales	Sales of fat tubers of yam are conducted in heaps of hundred (see Plates A & B of this chapter); seed yams sales are usually delayed till close to planting season when the price appreciates	*Both are sold at home and at markets*

Table 9-1: *Timing and Stages involved in Yam Cultivation in Ukum: From Bush clearing to Harvest and Sales*

With the help of a brief photo gallery (Plates J-P) some of the stages Ukum farmers follow in the cycle of yam production are illustrated below.

Plate 9J: *Seedlings in Storage.*

Plate 9K: *Clearing by Hand-pulling*.

Plate 9L: *Hoeing and Planting*

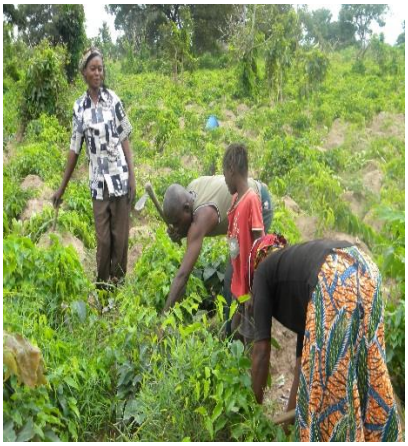


Plate 9M: *Yam Plot Weeding*

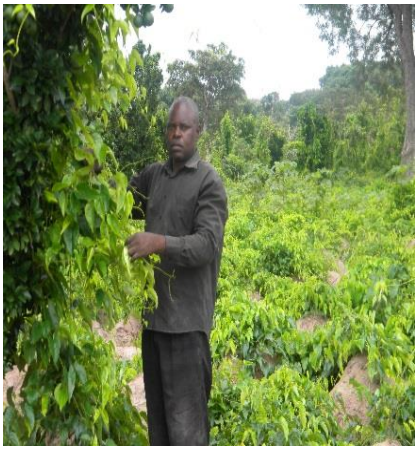


Plate 9N*: Tending a Yam Plot*

Plate 9O: *August Yam Harvest*

Plate 9P: *Storage by Earth-burying.*

Plate 9Q: *Yam at the Market*

Plate 9R: *Truckload of Yams leaves Ukum*

Vignette 9.2: *Groundnuts Production among Ukum Farmers*

As is reflected in the table that follows, the cultivation of groundnuts in Ukum does not necessarily require clearing new farmlands: farm plots from which yam is harvested is used for it. This, however, does not mean that there are no farmers who go into fresh plots for the cultivation

of groundnuts though this is a far less frequent practice. Ukum farmers' explanation for converting empty yam heaps into ridges for the planting of groundnuts is that it saves labor, time and money that otherwise would have been spent on fertilizer since it is believed the fertilizer applied to yam heaps is still in the soil and should therefore be optimally utilized.

	Stages Involved	***Months of the year when each stage of groundnuts growing***	***Comments***
1	Making of Ridges	March (late) to April (middle): Heaps from which yam was taken up are leveled out and converted into ridges to plant groundnut seeds	*At the end of yam harvest*
2	Planting of Seeds	March through to April: Planting of groundnuts is completed; it is done simultaneously with ridging knowing that this crop has very short life span (3 months) and rain sensitive. Usually no fertilizers are applied on groundnut plots for three reasons: 1) they say there is no need that their soil is naturally fertile; 2) the effect of the fertilizer from the yam is still there; 3) farmers are poor this time	
3	Weeding of the Plot	June: Weeding follows up soon after planting of the seeds; usually done only once since the crop's life span is a very short one	
4	Harvest	July and August: Farmers strive to complete groundnut harvesting within and not beyond these two months; it is done by hand-pulling	
5	Cleaning	July and August: After the ripe crop is harvested, they are tied in bundles and turned upside-down—so that rains will wash off the earth from the seeds; the bundles are carried to hand-dug ditches of 6ft (length), 4ft (width) and 2ft (depth) and beaten off the roots holding them; finally, they are carried home in basin and bags	
6	Drying	July and August: The lose seeds are exposed to the sun for drying; this duration depends on the intensity of the sun and on rains; they are poured out on bare, dry ground or on empty, dry bags or mats	
7	Shelling/Husking	July and August: Family members hand-pill or hand-husk the seeds and get them ready for bagging; others do this at the machine but face the risk of unfailingly selling at lower prices in the market	*Some sell the seeds that way*
8	Bagging and Storage	July, August and September: Once the groundnut seeds are dry enough farmers bag and get them ready for sales immediately or later—depending on the prevailing market prices; some stretch as far as close to the next groundnut planting season when its price is at its peak. Some also pour and leave the unshelled seeds on dry floors of the storage huts till when they are ready to sell them off	
9	Sales	July through to as late as March/April: Farmers sell their bags of groundnuts—shelled and unshelled—within these months; sales depends on family needs; lack of funds force them into early sales	
10	Uses	Groundnuts are used for many purposes—domestic consumption; vegetable oil, baking of cakes; major component for animal feed milling; making of compost manure; replenishing of nitrogen in the soil; source of revenue to meet household needs; and other uses	

Table 9-2: *Timing and Stages involved Groundnut Cultivation in Ukum: From Ridging to Harvest and Sales*

The case of groundnut cultivation in Ukum-Tivland provides a typical instance of dual or sequential cropping not only in Nigeria but also across many the regions of Sub-Saharan Africa. Below is a photo gallery of some stages of producing and processing groundnut in Ukumland.

Plate 9S: *Bundles of Harvested G-Nut*.

Plate 9T: *Moving G-Nuts from Farm to Threshing Pit*

Plate 9U: *Threshing of Groundnuts at the Pit*.

Plate 9V: *Hand-shelling of Groundnuts*

A

B

Plate 9X (A & B): *Bags of Unshelled Groundnuts Put Away in the Storage Waiting for Sales Season*

While not every Ukum farmer plants cassava beside yam heaps, it is the case that virtually all Ukum farmers follow up the harvesting of yam with the planting of groundnuts on the same plot. As was earlier stated, no new farmlands are necessarily cleared or hoed up; instead the heaps from which yams had been taken up are leveled down and raised up into ridges. When sustained rains close in (March to April) the actual planting of groundnut starts and, all things being equal, is completed within the same time. Ukum does this in the knowledge that groundnut performance is heavily rain-determined and rain-dependent; above all, they know that its life span is a three-month cycle. As such everything about it is done hurriedly. Harvest is done in July and August.

9.5 *Farming Tools/Implements in Ukumland: Past and Present*

Direct observation and detailed interviews with individuals and groups show that the following tools are used for food production among Ukum farmers, at least throughout the duration of this study. The tools vary according to their purposes.

Table 9-3: *Farming Tools and their food production Purposes among Ukum Farming Households*

	Tools/Implements	***Purposes the Farm Tools and Implements Serve***	***Comments***
1	Big Hoe	Used for making heaps/mounds/ridges/water ways in the farm	
2	Small Hoe	Used for weeding and harvesting of yams	
3	Cutlass	Used for cutting grass; bush clearing and felling of small trees	
4	Axe	Used for felling big trees in farmlands and cracking firewood	
5	Hammer	Used for straightening cracked edges of hoes and cutlasses	
6	Harvesting Stick	Used for digging out big tubers of yam (sometimes totally wooden; sometimes a wooden handle and a metal edge)	
7	Pickaxe	Used for stumping out roots of big trees in farmlands	
8	Fertilizer Peg	Used to open small holes on yam heaps to let in fertilizer	
9	Open pick-up vans	Used for conveying seedlings and farmers to and from farms and markets—though this is luxury for majority of farmers	
10	Wheel barrow	Used for conveying seedlings to the farm; moving produce from farms to homes or to markets, from homes to markets	
11	Basins	Used for carrying fertilizers, seedlings, and farm produce	
12	Sickle	Used for harvesting rice	

13	Go-to-hell	Used for hacking down orange, mango and paw-paw fruits	
14	Sprayer	Used for spraying insecticides and herbicides	

Plate 9Y: *Big hoe blades for making heaps.* Plate 9Z: *Small hoes for weeding*

These farm implements are fabricated by indigenous blacksmiths and wood carvers right inside the heart of Ukumland especially at the market locations; this is typified in the twin pictures (Plate 9Z-1) that follow. The fact that they are made at the market areas is said to offer both their makers and buyers easy business contact with each other within the place the goods are available.

Plate 9Z-1: *Two blacksith apprentices and their master using local furnace and amvil to beat pieces of metal into shape as hoe blades after wich they fit the blades into wooden handles to make whole hoes*

These farming tools have been in use in Tivland for as long as no living person can recall.

> Our forefathers used hoes the blade and handle of which were made of wood. Later, when they began to have access to metal they started using hoes with metal blades as we have and use them till today (Fieldnotes: September 26, 2013)

The only improvements that have been added to these farming instruments is that over time the hoe, which was all-round wooden, has assumed metal blade, and that Ukum farmers now use wheel barrows to go to the farm and markets. They do not foresee a future time when the use of hoes will be replaced by any other implements or equipment. In like manner many Ukum farmers do not seem to be open to the use of tractors for ploughing their farm plots. This is associated with some three major problems as they were presented: 1) first, their croplands are not big enough for that magnitude of mechanized agriculture especially as they get smaller over time with the consistently growing population; 2) second, only about 1 out of every 200 or more Ukum farmers can afford the costs involved in hiring a tractor; 3) third, and more contentiously, it would constitute a lot of boundary-related disputes and conflicts since using tractors would result in encroachment into and destruction of existing boundaries. An additional reason is that tractors can only be used for making ridges and not mounds the latter of which they prefer for yam cultivation.

9.6 *Analysis: Effects and Factors Affecting Farm Technology Adoption in Ukumland*

Following a three-step approach we conduct the analysis of our field data tracking first, the impact of both intercropping and sequential cropping on agricultural production; second, the effect of adoption or non-adoption of improved farming technologies and techniques; and third, factors that determine adoption/non-adoption of improved farming technologies and techniques in Ukum.

9.6.1 *Impact of Inter-and Sequential Cropping in Nigeria: The Case of Ukum-Tivland*

Study findings suggest that Ukum-Nigerian rural farmers spend many hours every day on land clearing, hoeing, weeding and other stages involved in food production without any commensurate output for this huge time, capital and labor investment. This discouraging drudgery, is significantly accounted for by the application of the same old, unimproved farming techniques as were laid out in the tables above. Many studies exploring risk factors impacting farming

households in SSA have also demonstrated that this situation accounts for why majority of such populations are at high risk of food insecurity and so can hardly feed themselves (Mkandawire and Matlosa, 1993: 69). Like Muhoho's (1989), this study also found that there is a yawning gap between what Ukum rural smallholder farmers realize from their farm input and what is potentially feasible with the application of mechanized technology in the region.

With reference to intercropping, Ibeawuchi (2007:46) argues in its favor, stating that it

> […] suppresses weeds, reduces pest disease infestation, gives yield advantage and there is stable yield over time. Intercropping encourages high nutrient uptake than in sole cropping and water use efficiency is high because of intercoopertive interaction between the intercrops. It encourages high soil fertility maintenance especially where legumes are used as component crop they provide continuous soil cover, which prevents direct impact of raindrops, which causes erosion.

Akobundu (1987), Kurt (1984), Moody (1977), Hart (1975), Reminson (1978), Nangju (1980), among others also support this cropping system maintaining that it gives a high total of return per unit area of land, and that it is consistent with farmers' goal of food security in addition to the reasons offered by Ibeawuchi (2007).

While there is some truth to some of the points forming the core argument advanced by these studies favoring intercropping in the tropics of Africa, this study found, however, that their conclusions over-simplify and romanticize the problem. This study found that intercropping also leads to soil nutrient depletion and environmental degradation occasioned, above all, by f excessive competition among intercrops—very serious results these studies left out. This is made worse by the fact that poor African farmers, typified in Ukum households, do not have the funds to afford sufficient fertilizer to help the natural fertility of the soil with the heavy load of many crops imposed on croplands and the competition over available nutrients it occasions between intercrops.

The argument promoted in favor of intercropping as is championed by Ibeawuchi (2007) and these others claiming that it is a farming system closely adapted to the prevailing ecological and socio-economic conditions of SSA obviously loses sight of the fact that even rural African farmers themselves are aware of its risks and disadvantages. To avert such dimerits they evolved regulations as to the number of crops that could be intercropped to avoid poor farm output. As Forde's (1964:23) study found,

> After the yam planting […] they plant between and on the side of the yam hills the minor crops of maize, coco-yams, okra, pumpkins, and beans [….] On the other hand the people[56] are aware that hills overcrowded with minor plantings are likely to yield poorly in yams and fairly strict limits are set to this interculture

This study further found that the practice of intercropping, while widespread among these rural farmers, is more the case in areas with high population density resulting in the continual fall of cropland size and corresponding subjection of the same piece of land to continuous and excessive cultivation with minimal break period of fallow and minimal or no application of fertilizers to replenish soil nutrients. Unfortunately, this aspect is not always accounted for when intercropping is one-sidedly appraised as a farming practice that is overtly positive in results.

A closely related finding of this study is that the disposition to adopt improved farming technologies is deeply behavioral; that is, the decision of farmers to make such adoption is influenced and determined by many things including economic, social, institutional factors (Akundugu et al., 2012:6). Similarly, study finding agrees with the statement that, "[…farmers'

56 By the "people" as is used here Forde (1964) was referring to the community of Umor village in Yako in the present-day Cross River State Southeast Nigeria where he conducted the studies monographed in the publication Yako Studies. In his words, "The Yako of Middle Cross River area of Obubra Division live in five compact villages a few miles apart" (p.1). "My main objective was the investigation of the economic life of a community of hoe cultivators in the West African forest zone, and I was concerned with the relations of this economy to both physical environment and social organization" (p.1)

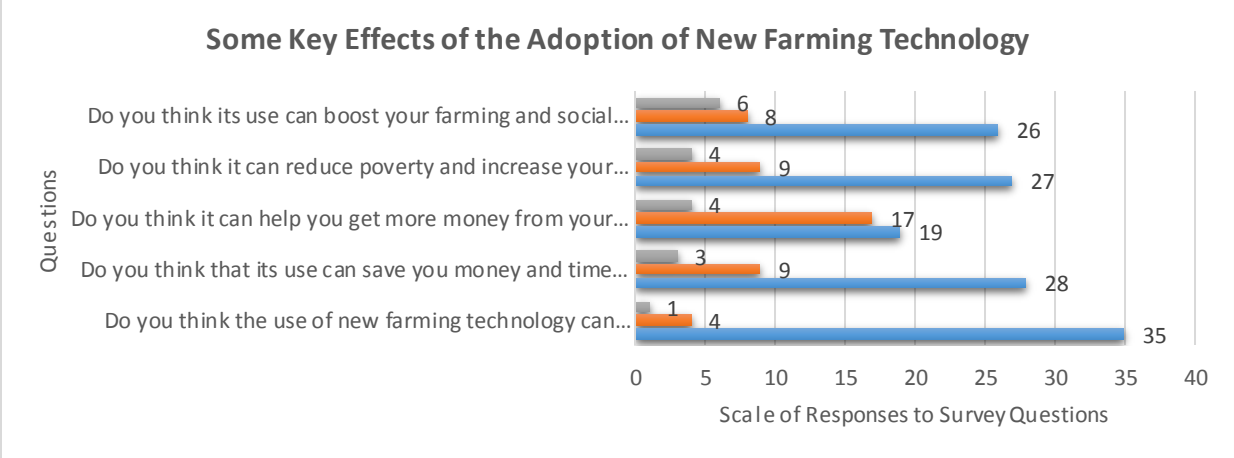
perceptions of technology characteristics significantly affect their adoption decisions" (Adesina and Baidu-Forson, 1995:1).

Based on the findings from direct observation and interviews and the analysis of the data therefrom, more questionnaires were floated tracking the effects of, and factors determining, the adoption of new farming technologies. The findings from both areas are represented in the following two brief sub-sections.

9.6.2 *Effects of Improved Farm Technology Adoption*

Table 9.4: *Tracking the Effects of Adoption/Non-Adoption of New Farming Technology*

Questions	Yes	No	Declined
Do you think the use of new farming technology can improve farm yield?	35	4	1
Do you think that its use can save you money and time in your farm work	28	9	3
Do you think it can help you get more money from your farmir activities	19	17	4
Do you think it can reduce poverty and increase your living conditions?	27	9	4
Do you think its use can boost your farming and social standing?	26	8	6



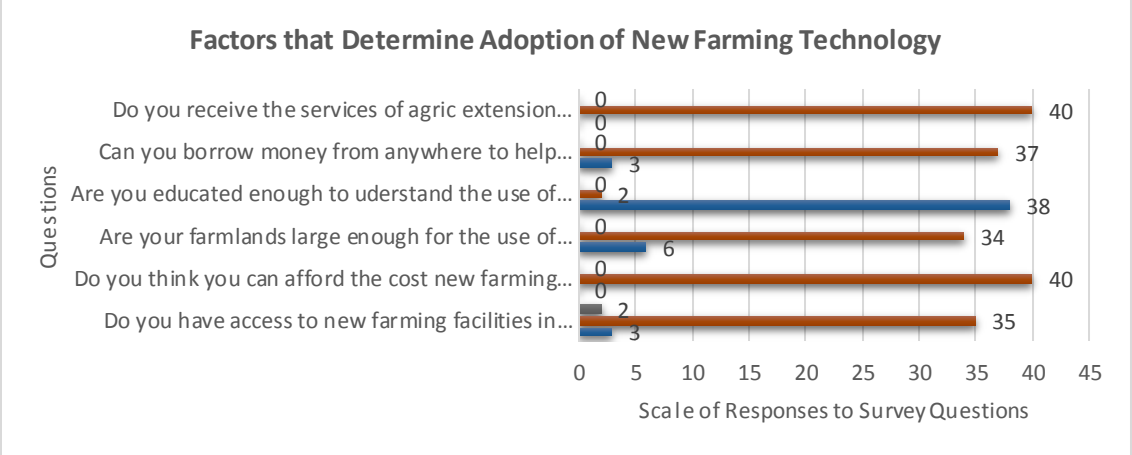
First, on farmers' level of awareness of the effects of the adoption of new farming technologies, study respondents overwhelmingly (35/40) indicated knowing that it can lead to increase in the output of their farm work. In like manner, more than half of them agreed being aware that it can help save some of the time and money invested in farm work (28/40); they also

agree it can help reduce poverty and improve farmers' living conditions (27/40); that it could potentially boost farmers' personal and social capital (26/40). Surprisingly, only about half of participants agreed this can help to get more income from farming (19/40). Much as this last point seems to stand against the other findings, this is apparently influenced by their perception of themselves as experienced farmers and further linked to low level of literacy as the data from a second table (below) and as interview responses strongly suggest.

9.6.3 *Factors Determining Improved Farm Technology Adoption*

Table9-5: *Tracking Factors Affecting Adoption/Non-Adoption of Farming Technology*

Questions	Yes	No	Declined
Do you have access to new farming facilities in your area?	3	35	2
Do you think you can afford the cost new farming techologies	0	40	0
Are your farmlands large enough for the use of tractors?	6	34	0
Are you educated enough to understand the use of new farming technologies?	38	2	0
Can you borrow money from anywhere to help you afford new technologies?	3	37	0
Do you receive the services of agric extension officers in your community?	0	40	0



The data on the determinants that influence the adoption or non-adoption of new farming technologies also point out important results. First, all 40 respondents stated that inability to afford the cost of farming technologies, that is, poverty, constitutes a big snag in their way to adopting them. To worsen this, almost all respondents (37/40) stated they are unable to borrow money from

any financial institutions to facilitate entry into the use of new technologies. On the other hand, 35/40 do not have access to new innovations of farming technology. Not surprising at all, all 40 participants acknowledged not getting any agricultural extension services (AES), a response which turned even worse when they were engaged in direct interviews, which revealed that they were ignorant of what AES is all about. Though nearly all study participants (38/40) claimed having good levels of education, the truth, however, is that the level of literacy among the old and young in these rural farming communities is alarmingly low; this is exemplified in the fact that two fairly literate primary school teachers were employed to help explain the questions to those selected to respond to the simple questions in the survey. Very importantly, the study also found that 34 out of 40 stated that their farmlands are not large enough to promote the use of such farm technologies as tractors. This is closely associated with an earlier study finding, that population increase (and its attendant pressure on land) together with the practice of traditional land tenure system in this area as in other parts of Nigeria and SSA form a constellation of forces to reduce the size of croplands at the disposal of farming households; the same factors kill farmers' investment initiatives. The table below summarizes the results from the two areas on effects of and factors determining adoption or non-adoption of new farming technologies in Ukum-Nigeria.

Table 9-6: *Effects and Determinants of Adoption of New Farming Technologies in SSA*

Effects	Determinants
Leads to increase in farm output	Poverty and lack of funds to afford new farming technology
Saves time and money inputs	Inability to borrow money from financial institutions
Reduces poverty and raises farmers' living standards	Lack of access to new farming technologies
Boosts farmers' personal and social standing	Lack of agricultural extension services
	Low level of education/literacy
	Small size of croplands inhibit the use of tractors

9.7 *Discussions*: *Appraising Study Findings in Light of Related Studies*

The foregoing sections of this chapter and the findings teased out from study field data lead necessitate appraising how the techniques and tools employed by Ukum-Nigerian and other SSA farming households impact agricultural production and food security in the region. This is more so when the findings of this study are placed on the scale of on-going scholarship on how the adoption/non-adoption of improved farming technologies portend to sustainable agricultural development in SSA and at the global level. Informed by field data, this study argues as follows: 1) the continual use of old and unimproved farming techniques and tools very significantly affect food production negatively; 2) it greatly accounts for why Ukum-Nigerian farming households lag behind in agricultural production; 3) it places them at high risk of food insecurity; 4) it makes them unable to improve their socioeconomics.

Rehashed and surmised in a positive tone, the instructive argument put out here strongly aligns with the insight from the study of Houmy et al (2013):

> Farm production can be substantially increased through the use of mechanical technologies which are both labour saving and directly increase yields and production. Inputs of hard labour by farmers and their families can be substantially reduced if they have access to a carefully selected tools, machines, and equipment. The labour released can be used for other productive activities. The use of improved mechanical technologies can also have a direct impact on yields and area under production (Houmy et al., 2013: iii).

The above points are in accord with the repeatedly tested fact that the use of agricultural technologies, which include mechanized farming techniques and improved tools affects the rate of increase in agricultural output, and also determines how the increase in agro output affects poverty levels and environmental degradation (Meinzen-Dick et al, 2002; Muzari et al, 2012). We employ the term *mechanization* here in the context of agricultural production to include those technological innovations and interventions including but not limited to tractor machines; research; hybridized seedlings of both crops and animals; facilities such as fertilizers, fungicides, herbicides and pesticides; knowledge dissemination machinery through agricultural extension services; soft credit

pockets; on-farm and off-farm storage facilities; agro produce processing plants; water resources management especially irrigation services; and, of course, the roles of state policy apparatus, institutions and infrastructure (Doss, 2014:2). All these are "[…crucial for farmers to achieve optimum profitability from their businesses and to attain an acceptable quality of life for themselves and their families" (Houmy et al, 2013:iii). As such this study buttresses the stand that, "One important way to improve agricultural productivity is through the introduction of improved agricultural technologies and management systems" (Doss, 2014:3).

On the Nigerian scene specifically, this practicum among models of food production has been amply employed as a springboard of research. For example, the study of Awotide et al (2013), which assessed the determinants of intensity of improved rice varieties adoption and market participation among rural Nigerian farming households, found a number of factors that influence farmers' adoption/non-adoption and market participation/non-participation. These include gender of household head, age of household head, wealth status, distance to source of seed, cost of seed, household size, contact with extension agents, membership of organizations, access to seed, total farmland, education background, and off-farm income (Awotide et al, 2013:1, 20).

Using this same model, Nwachukwu and Onuegbu (2007) tracked the impact of the level of adoption or non-adoption of improved farming technologies on the level of productivity in aquaculture farming in Imo State, Southeastern Nigeria. Their study found that the level of adoption of new technologies among fish farmers was low: less than half of the study participants adopted the technology. However, looking beyond the mere fact of the impact of the adoption or non-adoption of new technologies and tracking the role played by other correlated variables, Nwachukwu and Onuegbu (2007), Berdegue and Escobar (2001), Daniel, Wilson, and Myers (2005), Garfort, Angell, Archer, and Green (2003), Perkin and Rehmand (1994) underscore that

people do not just adopt a technology because it is available to them; even when the technology is available and appropriate, some personal and socio-cultural factors bear on the decision to adopt or not to adopt. Ogunremi and Oladele (2012) replicated this kind of study focusing on the Lagos-Nigerian fish farmers' disposition to adopting new fish farming technologies. They found that among the many who did not adopt, lack of fund (99.1%), effect of technology application (60.0%), and skill/manpower (59.0%) stood out as prime inhibitions.

Another study attempt in applying this model was that conducted by Awotide, Diagne and Omonona (2012), which focused on sustainable rice productivity and rural farmers' welfare in Nigeria. Like others they found that the use of improved technologies increases productivity and significantly generates an improvement in living standards of rural farming households in the country. In addition, they found that the two variables of access to seed and poverty incidence were highest among factors that dissuade non-adopters of the new rice growing technologies in Nigeria. In exploring the challenges of risk management among smallholder farmers in Ebonyin State, Southeast of Nigeria, Okereke (2012) found among other results that the adoption of improved agricultural technologies enhances productivity. According to his study, respondents submitted that the adoption of improved agricultural technologies is one of the strategies they employed in managing risks associated with agricultural production with the regrets that lack of access to improved farming technologies (95%), high cost of improved technologies (93%), lack of access to weather information (91%), and lack of finance (82%) are the major problems constraining their ability to cope with the challenges of risk management in agro production. As far back as some six decades or more before the present era of food crisis in SSA, Oluwasanmi's (1996) study bears the strong observation that,

> […] the most serious limitations to efficient production in agriculture are the nature of farming implements, the state of agricultural knowledge, the quality of the facilities available for the

> dissemination of existing knowledge and the general nature of the social and institutional framework within which the agricultural industry functions. These factors are inevitably reflected in the volume of agricultural output both for domestic consumption and for export, and the output per unit of resources employed in agriculture (p.109)

Across regions of SSA many studies demonstrate that failure to adopt modern agricultural production technologies to a large extent explains why farmers produce less than is desirable and therefore experience high levels of poverty. Many other studies have shown that this telling failure to adopt new agricultural production technologies with its many consequences are in turn determined by some major factors. Some of these include access to facilities and the inhibitions imposed on farmers by personal and social factors reducible to poverty or low socioeconomic standards (Awotide et al., 2012). Other such factors which, however, carry with them the earlier two include the 7-point summary represented by USAID (1977:1-2), which border on the economic constraints on agricultural technology adoption (in developing nations): 1) pattern of land size holding; 2) lack of technically trained labor for high-yielding variety technology; 3) the complexity of newly introduced technologies; 4) unavailability of required capital; 5) lack of adequate product and factor markets; 6) incongruity between recommended technologies and actual farmer conditions; and 7) inadequacy of research on the economics of technology adoption.

In the same vein, the study of the Food and Agriculture Organization (FAO, 2015) of the United Nations targeting food security impact and agricultural technology adoption under climate change in Niger of West Africa found among other things that, "[…] on average, the use of modern inputs has a positive and statistically significant impact on crop productivity" (FAO, 2015:25).

Adesina and Baidu's (1995) comparative study assessed the effect of farmers' subjective perceptions of agricultural technology characteristics on adoption decisions using improved varieties of sorghum in Burkina Faso and improved varieties of mangrove rice in Guinea—both in West Africa. Their study found not only that the use of improved crop varieties enhances

productivity but also that consumers critically evaluate characteristics of a product before adoption on the one hand, and that demand (of improved varieties) is affected by consumers' subjective assessments of products attributes, on the other. Other related studies such as those by Jones (1989), Lin and Milon (1993), Adesina and Zinnah (1993a) carried out under this same ideological breath but operationalized at different sites also ended in similar findings.

Furthermore, tracking the influence of agricultural production techniques adoption on food security in Burundi, Ahishakiye (2011) came to the conclusion as did Norton et al (2010), Beddington (2010), Jama and Pizarro (2008), and Jayna et al (2003), that while African nation-states responded to the situation of food crisis in the region by pursuing different policies and strategies aimed at stimulating the adoption of new technologies and ultimately to boost food production and reduce poverty and hunger, this move has borne far less than expected results in Burundi as in other parts of SSA. The reason for this, according to Ahishakiye (2011), is that SSA farmers are backward in adopting improved farming technologies with the result that they operate at levels of production far less than their potentials. In Ghana, Mamudu et al (2012) conducted a study using the same model and, like many others, they found that farm size, expected benefits from technology adoption, access to credit and extension services are the factors that significantly influence technology adoption decisions of farm households in Ghana.

In all this the Green Revolution of the Asian agricultural production experience has remained a constant pillar-reference point for dozens of empirical studies including David and Otsuka (1994); Datt and Ravallion (1998a, 1998b); DeJanvry and Sadoulet (2002); Evenson and Gollin (2003); Moser and Barret (2003); Minten and Barret (2008); Awotide et al (2013) to mention a few. These and related studies have consistently used the Asian experience as a motif to challenge other developing regions of the world especially Sub-Saharan Africa with their main

focus being a demonstration that the adoption of improved technologies is critical for agricultural transformation and poverty reduction in present-day global food need (Mamudu et al., 2012).

9.8 *Conclusion: Chapter Summations*

1) Prior to their encounter with Europe through the forces of colonialism, Ukum-Nigeria as other SSA communities practiced some degree of agricultural production but mainly for domestic purposes; some of what they produced, however, entered the sphere of exchange in markets.

2) This transition from foraging to agriculture—even at its inchoate stages—marked an irreversible watershed in the life of these SSA communities.

3) At this rudimentary stage, they used simple and crude tools and practiced bush fallowing in eking out their subsistence from their natural environment.

4) When Ukum-Nigeria and other parts SSA were invaded by European colonial forces—often for economic extraction—these indigenous African communities expanded the production of agricultural goods and so entered into full-blown monetized market exchange.

5) This contact in addition, above all, to the summoning of population growth with attendant increased need for food, there arose an urgent need to device and apply new technologies and techniques to meet this increased demand.

6) Unfortunately, up to this point of 21st century in the history of SSA, farmers still largely use the old and unimproved tools and techniques in agricultural production.

7) This makes it impossible for farmers to meet up with the high stakes of increased productivity.

8) For the same reason they are unable to catch up with the modern, global market competition since, with their simple tools and techniques, the quality of their produce strikes below international market standards.

9) As would be expected, this has also reduced the contribution of the agriculture sector to the GDP of the region and its share of foreign exchange earnings.

10) To add to all these problems, SSA farming households still practice intercropping and sequential cropping with all their consequences of diminishing returns.

11) These old fashioned farming tools and techniques are still in use partly because cropland size has continued to shrink over time.

12) This fall in the size of croplands is in turn caused by continuous growth in SSA population.

13) SSA farmers are not as quick as are circumstantially expected in adopting food production boosting technologies and farming techniques.

14) Appraised in the light of causality, it was found that poverty and or lack of requisite funds account for about 90 percent why farmers fail to adopt these new ways of doing old things.

15) On the other hand, lack of the requisite knowledge to appreciate both the need for and processes of handling new farming technologies and techniques take a major pie of the inertia to adopt.

16) The Asian Green Revolution agricultural production experience is used as a-ready-at-hand point of reference to illustrate the improved technology adoption ideology on the one hand, and using it to challenge the backwardness of SSA agricultural development, on the other.

Chapter 10: **Conflict and Agricultural Development in SSA**

10.1 *Chapter Overview*

This chapter examines how conflict impacts agricultural development in Ukum-Nigeria. It is at the same time intended to serve as an extended stretch for understanding how conflict affects the prospects of agricultural development among other framing communities of SSA. Like the rest, it is premised on one of the on-going theoretical prongs with which this study started, namely, that agricultural production, like all other human activities, is situated and occurs in often complex contexts including natural, social, political, economic, ecological, cultural, institutional among other settings all of which form a constellation and landscape of conditions that shape and determine its functioning. The chapter takes a quick look at conflict in general; it locates it in its occurrences among farming communities in SSA but only for the purpose of examining above all the causes and impact of conflicts on agricultural production in the area. A few SSA regional concrete instances are examined and fielded in to help for tracking and illustrating key consequences of conflict in Ukum, Nigeria and by extension to SSA. In a special way the chapter tracks how conflict intersects with investment in agriculture in relation to overall economic development. Over and above these aspects, the chapter stretches into conflict management focusing specifically on conflict resolution and transformation in order to guarantee uninterrupted, sustainable agricultural development and general economic growth in affected areas.

Thus poised the inquiry of this chapter is informed and guided by questions like: 1) In what consists the nature of conflicts in general regardless of which type they are? 2) What are the causes of conflicts in Ukumland, Nigeria? 3) What are its impacts on economic growth? 4) In what ways does conflict impact Ukum-Nigerian farmers? 5) What must be done to manage conflicts with the aim to guarantee sustainable agricultural development in the area?

10.2. *Nature and Characteristics of Conflicts in General*

Whatever one might say about the nature of conflict—of all kinds and manifestations—it would not miss the fact that "[…] it is an ever present phenomenon in social relations" (Alimba, 2014:180). That goes to underscore the fact of the inevitability and embeddedness of conflicts in all social forms, both in their morphological[57] and physiological[58] conditions (Radcliff-Brown, 1965:80-81), local and global alike. The fact that conflicts are usually associated with negative effects makes its definitions or interpretations also rendered in negative terms. As such conflict is conceived as a state of incompatibility and a state of "[…] escalated competition in any system level between groups whose aim is to gain advantage over other groups" (Rumun, 2013:9; Angaye, 2003; Rechler, (2001). Seen in this light, conflict is a state whereby the concerns or interests of two or more individuals or groups operating within the same unit appear incompatible (Daring and Fogliasso, 1999). Thus understood as a state of incompatibility, conflict is further rendered as breeding a psychological landscape in which people or groups cannot agree or get along with one another in sociopolitical settings. It is also in this light that conflict is understood as an antagonistic, inhibitive behavior of a person or group aimed at preventing another from attaining some goal/s (Gray and Starke, 1984). Conflict rendered in this sense is understood as an *Other*-excluding opposition aimed at blocking a person or group of persons from attaining target goal/s which, in the same token of logic, triggers a feeling of manifest or latent reactionary opposition in him or

57 *Morphology* is the study of the forms of things more so in biology and so refers to the branch of the biological science dealing with the forms of living organisms. Applied to the human society, it connotatively refers to the sociology of the social forms that form the institutional structures that make for the functioning of a human society (for more on this, see Radcliff-Brown, 1965:194-5).

58 *Physiology*, which is closely related to morphology, is the branch of the biological science dealing with the normal functioning of the parts of an organism and the functional relationships between them. It is analogously applied to the human society and refers especially to the relationship between its constituent social institutional parts (for more on this, see Radcliff-Brown, 1965:195).

those thus blocked. Unlike the Durkheimian (1984) spirit of cooperation and collaboration characterizing the commonality and complementarity of the interests of those involved in the division of labor in society, which in turn fosters social solidarity or cohesion (see also Radcliff-Brown, 1965:199-200), conflict understood as opposition is represented as a disagreement of interests which, by being mutually exclusive, breeds felt mutually exclusive struggle (Wilmot and Hocker, 2011) and, in fact, inhibits the realization of goals sometimes on both sides (Donohue and Kolt, 1992). Informed by this understanding of conflict, Ezeibe (2011:2) writes: "Human history is the history of conflicts of values expressed in various inter and intra religious, ethnic, regional or class conflicts and contradictions."

Historically, this way of viewing conflict strikes at the roots of the ideas of Marx and Engels (1968) in which they argue that the history of all hitherto existing society is one of class struggle. These many negative ways of representing conflict are surmised in the description of Otite et al (2006) and Rumun (2013) as a situation where different people pursing different goals in contiguous or separate territories have the potential of creating situations of opposition one against the other. Shocking but real, this view of conflict, which ideologically differs from the Hegelian "reason in history"[59] informed view of conflict, is the interpretive mode through which we examine the conflict-agricultural development study in Ukum-Nigeria and SSA in this chapter.

59 "Reason in History" is one of the major tracts in the Philosophy of History expounded by Hegel (1770-1831) which runs across the breath of his works especially his opus magnum, *Phenomenology of Spirit* (1977) and in his other great work, *Philosophy of History* (1953). The question of how Reason is determined in itself and what its relation is to the world coincides with the question, *What is the ultimate purpose of the world?* This question implies that the purpose is to be actualized and realized. Two things, then, must be considered: first, the content of this ultimate purpose, the determination as such, and, secondly, its realization. To begin with, we must note that world history goes on within the realm of Spirit. The term "world" includes both physical and psychical nature. Physical nature does play a part in world history, and from the very beginning we shall draw attention to the fundamental natural relations thus involved. But Spirit, and the course of its development, is the substance of history. We must not contemplate nature as a rational system in itself, in its own particular domain, but only in its relation to Spirit (Thoughts of Georg Wilhelm Friedrich Hegel, 1770-1831; translated by Robert Hartman).

10.3. *Tracking the Impact of Conflict on Agricultural Production/Investment in Ukum-Nigeria*

To get to the core-point of conflict in Ukum-Nigeria on the one hand, and how it impacts the prospects of agricultural development in the area on the other, this section represents field data as are displayed in the accompanying tables. This will be followed by analyzing data from questionnaire responses, non-scalable responses from interviews, and data from direct observation.

10.3.1 *Targeting the Impact of Conflict on Agricultural Production in Ukum-Nigeria*

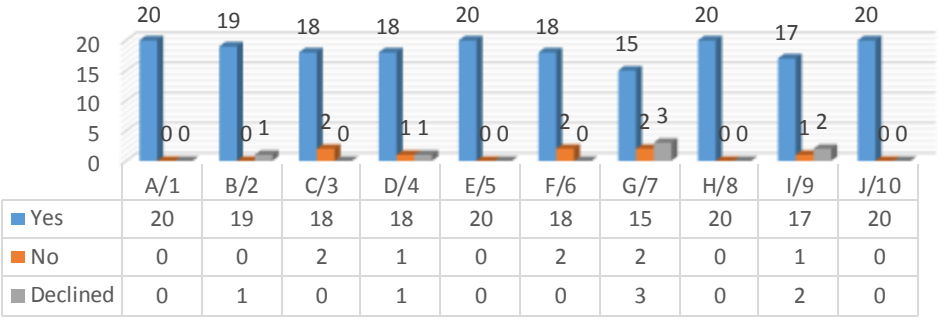
Informed by our preliminary interactions with farmers, traders and business men and women from the study site, the questions in the table below (10.1) were used to gather data working with 20 participants who were also engaged in follow-up one-on-one interviews. The data gathered from respondents are laid out in the table and chart below.

Table 10.1: *Questions Tracking the Impact of Conflict on Agricultural Development in Ukum*

A/1: Do conflicts bring about significant out-migration in your community?
B/2: Do conflicts bring about high death toll in your community?
C/3: Do farmers abandon their farms when conflict looms or occurs?
D/4: Do conflicts make for reduction in areas of farmland covered?
E/5: Do conflicts go with corresponding fall in output of food crops?
F/6: As a farmer does conflict discourage you from farming activities?
G/7: Do conflicts enhance the spread of infectious diseases in your community?
H/8: Do conflicts bring about increase in the price of food crops in your area?
I/9: Do conflicts discourage prospective domestic and foreign agro-investors?
J/10: Is there any direct connection between conflict and rate of poverty in your community?

Table 10.2: *Impact of Conflict on Agricultural Development in Ukumland, Nigeria*

Questions	**Yes**	**No**	**Declined**
A/1	20	0	0
B/2	19	0	1
C/3	18	2	0
D/4	18	1	1
E/5	20	0	0
F/6	18	2	0
G/7	15	2	3
H/8	20	0	0
I/9	17	1	2
J/10	20	0	0



	A/1	B/2	C/3	D/4	E/5	F/6	G/7	H/8	I/9	J/10
Yes	20	19	18	18	20	18	15	20	17	20
No	0	0	2	1	0	2	2	0	1	0
Declined	0	1	0	1	0	0	3	0	2	0

Table/Chart 10.1*: Impact of Conflict on Farmers of Ukumland, Nigeria*

10.3.2 *Field Data Analysis: Study Findings—Part 1*

First, study data make it overwhelmingly clear that there is a direct correlation between conflicts and out-migration among Ukum-Nigerian rural as all 20 respondents indicated. With 19 out of 20 farmer interviewees admitting that conflicts bring about high date tolls upon their communities it is immediately and directly understandable why migration especially among young adults is usually very high in areas hard hit by conflict. Follow-up accounts of some informants state that some of these conflicts are socially engineered by their chiefs and elite whose prebendalist60 agenda is often hidden under the guise of community welfare and good.

According to study data,18 out of 20 farmers abandon their crop plots when conflicts strike; similarly, a very high majority of Ukum farmers (8 out of 20) experiences very high drop in crop production, and this is partly accounted for by the telling levels of discouragement among farmers

60 *Prebendalism* refers to political systems where elected officials, and government workers feel they have a right to a share of government revenues, and use them to benefit their supporters, co-religionists and members of their ethnic group, and whom they, ipso facto, zombify and instrumentalize, but only to boost their purely utilitarian, materialist agenda. The term is commonly used to describe the patterns of corruption in Nigeria, and to point out why its democracy is not working. Though used in other or similar nomenclatural epithets all of which critique and caricature the flawed practice of democracy in Nigeria and other parts of Africa, it was Richard Joseph's (2014) contribution that made it gain higher and projected currency in literature especially on corruption in Nigeria and its African likes.

whose motivation to produce is deflated. A majority of respondents (15/20) affirmed that conflicts are often correlated with the spread especially of sexually transmitted diseases. Upon closer follow-up interviews, it was found that the 2 farmers who answered in the negative and the 3 who declined the question made their responses as a result of the psychological shame and embarrassing discomfiture this question unavoidably arouses.

On the other hand, it is strikingly important that all 20 participants stated that conflicts bring about sharp increase in the prices of foodstuffs in the immediate conflict zones as in the wider areas of neighboring rural and urban communities. Whereas 17 out of 20 farmers see conflict as directly discouraging to prospective agro-based domestic and foreign investors in their communities, all 20 overwhelmingly agree that conflict inflicts wide-spread and multistranded poverty upon them. When further pressed in interviews in the direction of causality, all respondents agreed that land and resources therein are almost always the reason for conflicts; this explanation was given for conflicts within and among communities of Ukumland and those that occur between Ukum-Tivland and other neighboring populations or ethnic groups like the Jukun of Taraba State.

10.3.3 *Targeting the Impact of Conflict on Agricultural Investment Incentives in Nigeria*

As follow ups, questionnaires were floated among investors, traders and other business people around Zaki-Biam market of Ukum LGA aiming to pool data to be compared with findings from Ukum indigenous farmers. The same people were engaged in follow-up interviews. The overall aim was better understanding of how conflict affects agricultural development in the area.

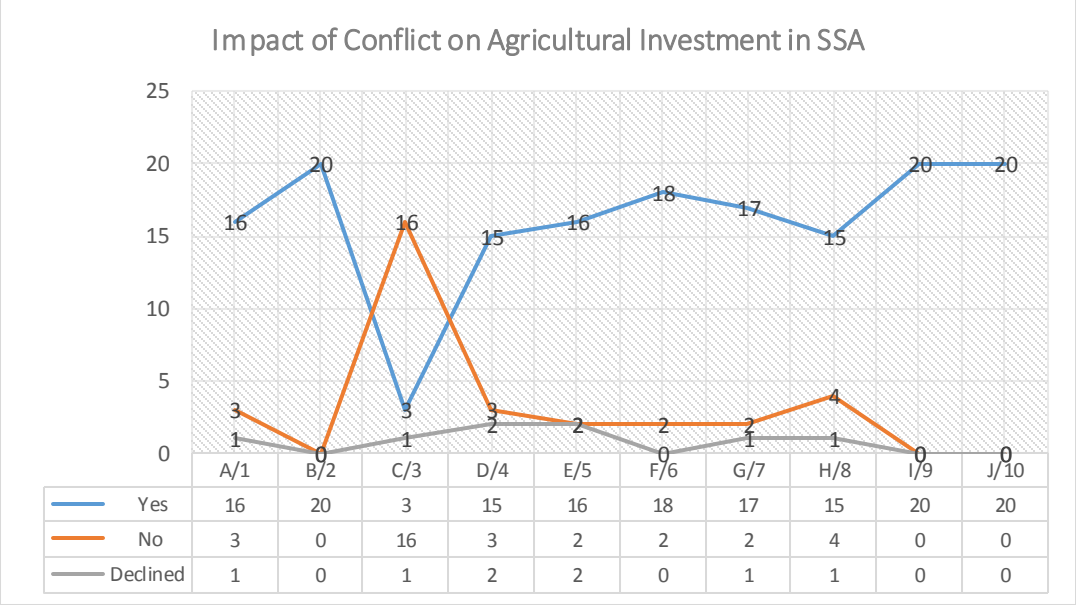
Table 10.2: *Questions Targeting Non-Ukum Business Men/Women and Traders in Ukumland*

A/1: Have you ever experienced any cases of conflict in Ukumland?
B/2: Do conflicts negatively affect investors' businesses in Ukumland?
C/3: Do you feel secure doing business around the Zaki-Biam market area?
D/4: Have you ever been hard hit by the outbreak of conflict in Ukumland?
E/5: Were your business assets looted during the crisis of conflict?
F/6: Did you witness any persons die during conflict here in Ukumland?
G/7: Have you ever felt discouraged by conflicts from expanding your investment here?

H/8: Are other investors discouraged from investing their resources in Ukumland?
I/9: Do conflicts bring about increase in the prices of food crops and all commodities?
J/10: Do you feel there is effective institutional conflict management tools here?

Table 10.3: *Impact of Conflict on Agricultural Investment in Ukumland, Nigeria*

Questions	Yes	No	Declined
A/1	16	3	1
B/2	20	0	0
C/3	3	16	1
D/4	15	3	2
E/5	16	2	2
F/6	18	2	0
G/7	17	2	1
H/8	15	4	1
I/9	20	0	0
J/10	20	0	0



Table/Chart 10.2: *Impact of Conflict on Agricultural Investment Incentives in SSA*

10.3.3.1 *Field Data Analysis: Study Findings—Part 2*

First, study field data show that majority of investors (16 out of 20) who operate business around conflict-prone areas of Ukumland have been directly negatively impacted by conflict. While all 20 respondents admitted that conflicts very negatively affect their investments, 16 out

20 investors expressed feeling insecure around the conflict-ridden areas of Zaki-Biam and Ukum LGA in general. On the other hand, while 15 out 20 investors stated that they had been hard hit by conflicts, 16 of them indicated that they were looted especially by indigenes in the heat of conflicts and, as a case in point, they referenced the 200161 experience of near genocide in Ukum-Tivland. In like manner 18 out of 20 respondents admitted seeing people killed during seasons of conflict in Ukumland; on the other hand, 17 investor-respondents indicated being discouraged from investment while 15 admitted knowing that conflicts discourage other fellow investors as well. It is not surprising that all 20 business investors stated that prices of food crops and all commodities skyrocket when conflicts strike. Finally, all 20 participants also indicated that, as of the time of this study, not much has been done by the government to install reliable and sustainable institutions of conflict management to guarantee security in the area.

10.3.3.2. *Seeking Patterns and Agreements from Different Areas of Field Data*

With the foregoing analyses drawn from a range of field data, a complex web of connections among closely correlated impacts of conflicts on agricultural and general development of Ukum-Nigerian communities can be stretched out. In a simple and straightforward sequence, the argument here is that, when farming communities of Ukum as with other areas of Nigeria lurk in conflict, as they often do, many people flee those unsafe niches and more so to save their lives. Among those who escape conflict-ridden environments young adults who constitute the heart of the requisite labor force assume the greater majority. From many follow-up interviews on why youths are the age range who flee most, many explained that the political elite of their communities

61 This reference is (frequently) made to the occurrence of the violence of October 22, 2001 when, in response to the on-going, decade long Tiv-Jukun conflict, "[…] the Nigerian army killed more than two hundred unarmed Tiv and destroyed their homes, shops, public buildings and other property in more than seven towns and villages in Benue State, Nigeria (Amnesty International, 2002; Ciboh, 2014; Vanguard Newspaper, November 19, 2001).

play opportunism by fronting and sponsoring young men to go into war many of whom die therefrom. However, whether they die in the field of conflict or flee their communities, the study found that they invariably abandon their farms and their aged, frail and vulnerable family members behind. With this and subsequent drop in areas of land subjected to cultivation in the next farming season, the communities experience corresponding sharp fall in agricultural productivity. With these there ensues food shortage; this is further aggravated by the fact that a good number of farmers are already down with debilitating diseases associated with rape, hunger and undue exposure to malaria infection in the wild of refugee camps and forests.

In the face of the insecurity created by ethnic conflicts investors find no compelling reasons to cast their treasure in the affected communities especially as many of them lose their business assets to looters most of whom are indigenes. Overall, therefore, Ukum farming communities as with other Nigerian farming communities experience the horror of food insecurity, high prices of food stuffs and other commodities, backwardness and circular poverty due to constant conflicts.

Engaged in interviews on the issue of why Ukum-Tivland communities experience many and sometimes enduring conflicts among themselves and with their non-Tiv neighbors, many explained as follows: 1) First, that conflict is unavoidable among them because they and their neighbors are either farmers or pastoralists who are always in need of more land against the pressure mounted by increased food need and population growth. 2) The second explanation appealed to the primordial conflict which led to the fission of the original Tiv group during the first stages of its migration and settlement where it is now. Incidentally, those who participated in the interviews would not see conflict differently ended in vain efforts; instead they cited the many conflicts within and around their area to argue that conflict is unavoidable. Particularly, however, they blame the government for not making enough effort to institute effective conflict management

mechanics in their communities, and that when the government does at all, it does so in such ways that favor some communities to the detriment of others.

10.4 *Appraising the Conflict-Agricultural Development Ideology in Ukum-Nigeria*

In placing the foregoing study findings alongside those of other studies across other Nigerian and SSA communities, this research focuses on two aspects for comparison: causes and impact of conflict on agricultural development in Ukumland, Nigeria and SSA at large.

10.4.1. *Causes of Conflict: Findings from other Studies on Nigeria and SSA*

In groping for causal explanations of conflicts in SSA many scholars including Arnold (1999), Uwalaka (2003), Matlosa (2006), Achodo (2000), Okere and Njoku (2004), Artadi and Martin (2003), Uchendu (1965), Alimba (2014) among others hone in on the fragile post-independence historico-political landscape directly precipitated by European colonial legacy which, from all intents and purposes, successfully and unsuccessfully imposed indirect rule on African communities aimed at hegemonizing populations that otherwise co-existed separately even in the face of their sociocultural differences. However, by so doing, these students of contemporary Africa argue, that colonial rule distorted by amalgamating or separating peoples in such ways that made "[…the struggle for political power, and control" (Uwalaka, 2003) the epicenter of life in post-independence Africa. This is typified in the Nigerian case, for example. Arnold (1999) aptly captures this historical backdrop:

> The state of Nigeria was an artificial British imperial creation whose major groups—the Hausa-Fulani of the north, the Yoruba of the west, and the Igbo of the east—were each larger than most individual African states. Britain fostered strong regional governments and, moreover, encouraged a sense of regional rivalry, maintaining the balance between the three great regions f rom the center. There was no historical basis for the unity of these three and their different ethnic groups, except British imperial*62 convenience*. At independence, therefore, the new Nigeria

62 If the partitioning (and stitching) of regions of Africa was informed by "British imperial convenience," then, it is because it was an agenda that had a driving economic reason in all its stages.

> inherited three powerful regions whose interests tended to draw them away from central authority and, once the British had departed, there was intense rivalry as to who should control the center.

In sum, this economically driven colonial balkanization and amalgamation of regions that ordinarily had nothing in common—except as they would later have oil in common to fall apart on it—would almost immediately be put to the test "[…] by inter and intra, regional and sectional disagreements […]" (Uwalaka, 2003). It was this unhealthy political atmosphere that ruptured and culminated in the full blown, total war of 1967-1970 in Nigeria with its multistranded fratricidal consequences the rippling effects of which still linger across the nation till date.

For another group of scholars disputes over land and ecological resources, population explosion and the need for more land, boundary, territoriality, domination, oppression and exclusion, indigene-settler divide, chieftaincy and power relations, religious differences, are specific causes of a particular character of conflicts classified as inter-intra-ethnic conflicts. Otite, et al (2006), Onwuzuruigbo (2009), Rumun (2013), Adesoji and Alao (2008), Bond (1972), Okoli and Atelhe (2014), Marietu and Olarewaju (2009), Thebaud and Batterbury (2001), Kimenyi et al (2014), Idowu (2001), Oladoyin (2001), Obono (1999), Babajimi (2003), Akinteye (1999), Albert (1999), Tishkov and Rupensighe (1996) are only a few among many scholars whose causal accounts of conflicts in SSA tap into this wide theoretical framework.

Using the 1992 Ugep-Idomi boundary conflict in Cross River State of Nigeria as a case in point, Okoli (2012:11) furthers the land-related resources causal explanation and argues that boundary in relation to "[…] land, water, oil wells or other important natural resources […]" is at the root of violent feuds between communities, and that these have continued to be on the increase in Nigeria. Other scholars including Ibeanu (2008), Aluaigba (2001), Adesoji and Alao (2008), Onwuzuruigbo (2009), Marietu and Olaweraju (2009), Alimba (2014), and UNDP (2009) further

elongate and swell the list of studies linking conflicts in Nigeria and SSA directly to land and natural resources.

While not differing from the foregoing other scholars such as Suhrke (1996); Baechler (1998); Gleditsch (2001); Okoli and Atelhe (2014) talk rather of "ecological resources" in their account of causes of conflicts in the region. Blench (2004) uses the case of natural resource conflicts in North-Central Nigeria to exemplify this ideological interpretation. In his summations he argues that natural resource conflict is more dispersed than socio-political conflict. Natural resource conflicts usually occur in inaccessible hinterlands and often go unreported regardless of the fact that such conflicts are "[…] an important factor in the recurrent food crises characteristic of sub-Saharan Africa, since it deters those in rural areas from investing for increased production" (Blench, 2004: Summary-i).

Focusing on age-long conflict resolution mechanisms in Nigeria, and using the Mbaduku-Udam crisis bordering on territoriality to illustrate his case, Gbenda (2012:156, 159) identifies "[…] land space and the resources available as one of the causes of […] conflicts in Nigeria." Others like Alubo (2006:34) and Ayua (2006:66) also argue in the same light and conclude that territoriality in the sense of land area occupies centrality in inter-intra-ethnic conflicts. They argue also that some of such conflicts date back to historical moments before the independence of Nigeria in 1960. Gbenda (2012:159) offers a deeper reason why these conflicts rage around land:

> The major occupation of most of ethnic groups who inhabit the North-Central Nigeria is farming. The need to acquire and use land for farming purposes has, therefore, been at the root of several crises in this region (see also Ukpenetu (1987:v); Etiowo (1985:viii)

These ideologically differentiated accounts of conflict in SSA sometimes athwart each other seem to fall within the wider anatomic ambience captioned "Structural Causes of Conflict" by The Institute for Peace and Conflict Resolution of the Federal Republic of Nigeria (IPCRFRN,

2003), for example. According to the afore-cited institute, structural causes of conflict consists of four main manifestations including, 1) Security-related manifestations of conflict further broken into proliferation of small arms, corruption of law-enforcement agents, and vigilante groups; 2) Political manifestations of conflict including, political conflicts, succession and dethronement conflicts, and territorial disputes; 3) Economic manifestations of conflict embracing general, poverty and inequality, resource competition, unequal development, market competition; and 4) Social manifestations of conflict including ethnic and communal conflict, youth unemployment, the situation of women, breakdown of social values, and psycho-cultural dispositions.

Varied as these contextually and ideologically driven accounts of conflicts in Nigerian and SSA seem, it is thought here to be an unsuccessful attempt at making any clear-cut differentiations at the level of causality in matters concerning conflicts in the region. Instead, from insights furnished by study data and the findings they lead to, it is argued here that these shades of causes of conflict in Nigeria and SSA are intricately interwoven so much that any attempts at understanding one must invariably make for understanding the rest. Even the IPCRFRN (2003) document earlier cited admits the intricate interconnectedness of causes of conflict across SSA.

> A particular conflict locale may exhibit the signs of more than one category (manifestation) of conflict. The conflict in the Niger Delta, for instance, is an economic one (struggle for benefits derivable from an oil producing community), an ethnic/communal one (the economic benefits mentioned above accrue to communities and the ownership of the land where the oil is located is therefore crucial to the enjoyment of benefits), a political one (political authorities must be those sympathetic to competing claims and all efforts to ensure that each party's candidate carries the day is put in), and one about traditional institution (the Urhobo and Ijaw contest of the claim of the Itshekiri to exclusive indigeneity of Warri and even the title of the paramount ruler of the Itshekiris as the Olu of Warri). Other conflicts in the country exhibit this multiple character trait. Actors in these multiple "battle fronts" are often the same (IPCRFRN, 2003:43)

Richardson and Sen (1996) not only corroborate the same point of the interconnectedness of causes of conflicts in SSA but also underscore that economic development is often accompanied by violent ethnic conflict. In light of the foregoing, therefore, this study refuses to be glued to only

one explanatory mode in tracking the macro (overall economic growth) and more so the micro (agricultural development) causes and impact of conflict in Nigeria and SAA. Not even the selective, persuasive leaning of Onwuzuruigbo (2009:2) that, "Of all forms of group conflicts, it would seem that ethnic conflicts have remained the most entrenched and intractable in Nigeria" seems ideologically compelling enough to sway the findings of this study in that direction.

At least for now, we note that all forms of conflict in Ukum, Nigeria, SSA as anywhere else in the world produce one common feature regardless of where and when it occurs: conflicts halt human activities; they lead to stagnation of economic performance; and they bring about breakdown of social order and political stability necessary for any societies to function well. As Richardson and Sen (1996) argument goes, this study concludes that social disintegration and economic decline are the most probable outcomes of conflicts.

10.4.2 *Conflict and Agricultural Development in Ukum-Nigeria: What Other Studies Say*

On the agricultural production costs of ethnic conflict, Rumun (2013) and Lincoln (2004) argue that massive loss of lives, destruction of property, and exposure to diseases on the one hand, and hindering of man power growth, labor strength, socio-economic development, collapse of social cohesion and political stability on the other, are some of the costs of conflicts in many parts of SSA as were found by this study in Ukumland, Nigeria. UNFPA (2001) underscores that conflicts in SSA threaten women and girls with reproductive health problems including STIs, unwanted pregnancy, and maternal mortality. Onwuzuruigbo (2009), Fagbemi and Nwakwo (2002) and UNESCO (2003) further the argument of the dire consequences of conflicts on women and girls demonstrating that the confusion ensuing during and immediately after conflicts and wars disrupts sources of livelihood and socio-economic activities of women. This is in addition to the fact that the male folks in their lives—their husbands, brothers and sons, who are the main

combatants in the conflicts—are often either seriously injured or killed, while the women themselves are subjected to the horror of rape or even killed too. In like manner, UNHCR (2006) documents that conflicts and civil wars greatly increase the risks of infectious diseases with the usual sexual violence they bring upon women and young girls.

For UNFPA (2001) conflicts are linked with trauma which is in turn associated with poorer daily functioning, physical limitations and chronic medical conditions. In their separate studies covering Liberia, Sierra Leone, Rwanda, South Africa and Nigeria, Aning (1998), Turshen and Twagiramariya (2001), Ikelegbe (2005) confirm similar findings bordering on the many untold harm women suffer during conflicts and wartime in SSA. The cross-country comparative study of UNESCO (2003) report confirms similar discoveries and findings.

Pushing the conversation further, Okoli and Atelhe (2014:84) found that between 2011 and 2013, conflicts led to the loss of lives, about a hundred and thirty (130); this is in addition to dozen people who were rendered morbid, displaced and thus became homeless and destitute. Many sources report that in the Aguleri-Umuleri land or boundary conflict in which automatic weapons and dynamite were used and thus described as "[…] the theatre of fratricidal war" (Eke,1999), EPCPT (1999), AFP (1999), AP (1999), UN-IRIN (1999), DPA (1999), TBH (1999), and Vanguard (2000), thousands of people fled for refuge in schools and public buildings; more than 300 people were killed; another 120 people were killed in the renewed episode of the conflict. Still on the general implications of conflicts for economic development, Aluaigba (2001:4) documents that conflicts keep affected communities on a very low level of agricultural and general economic performance especially as they often decimate huge numbers of the waring populations. Thus in underscoring the far-reaching effects of conflicts, Arias et al (2013:2) conclude that "[…] conflict imposes costs beyond destruction."

On the impact of conflicts on agricultural production specifically, Okoli and Atelhe (2014:85) record that ethnic conflicts lead to diminished fortunes in agricultural productivity especially when they occur during farming seasons, which causes most farmers to abandon their farms and flee for fear of being attacked; this in turn results in the consequence of low agricultural productivity in the following harvest season. They also found cases of the destruction of farmlands, farm crops and the killing of cows all of which result in real and quantifiable material losses. A World Bank (2007) study lays out a wide range of findings including that conflicts lead to high rate of youth unemployment, high incidence of circular poverty, low per capita income, overall economic decline, double loss caused by diverting resources to destructive activities, more backward economic growth, forced migration, reduced access to education and health care, increased risk of predatory and contagious diseases in refugee habitations and camps, and increased mortality rate.

10.4.2.1 *Comparative Cases of the Impact of Conflict on Agricultural Development in SSA*

The comparative study of Kimenyi et al (2014) tracked the specific ways conflict impacts agricultural production in two countries of SSA, namely, Mali and Nigeria. This study throws more light on, and confirms, the findings of the current study; as such it provides a comparative ground.

10.4.2.1.1 *The Case of Mali—The 2012-2013 Political Conflict*

In the case of Mali, the study documents that the 2012-2013 conflict had severe socio-economic consequences on the country: 1) international nongovernmental organizations (NGOs) withdrew from the conflict-ridden to more secure areas while in some cases they withdrew completely from the country; 2) the insecurity generated by the conflict disrupted the provision of basic social services including medical care, education, water, and electricity; 3) it also engendered pervasive looting of financial service providers and cereal storehouses by armed groups; 4)

investments and businesses in tourism and foreign aid were also heavily affected; 5) it brought about the displacement of a great number of the population—about 75,000 were internally displaced while 100,000 were refugees in neighboring countries as of June 30, 2013, as the UN estimates indicate.

The study illustrates how the conflict that resurged in 2012 in the Republic of Mali[63] provides some of the telling ways it impacts agricultural production in SSA:

> The conflict had a significant impact on the largely agriculture-based Malian economy. Agriculture contributes to nearly 40 percent of gross domestic product (GDP) and employs 80 percent of the Malian population[64] [….] The local economies in the north were especially disrupted by the surge in insecurity. Before the onset of the 2012 crisis, geographic disadvantages and recurrent political instability already posed challenges to livestock herding, agriculture and trade—the major economic activities of the region. The areas most heavily affected by conflict are in the Sahara desert, which receives yearly rainfall ranging from less than 150 to 200 millimeters (Kimenyi et al, 2014:6).

Continuing, Kimenyi et al (2014:8-9) documents how the Malian conflict specifically impacts crop value chain in the country:

> In the conflict-affected zone, farmers grow primarily rice, millet, sorghum and some wheat, with rice being the main crop cultivated. In Gao, rice is the major crop grown, accounting for about 80 percent of the total area cultivated. In Timbuktu, millet is the major crop accounting for about 50 percent of the total area cultivated in 2012 [….] Although most of the data on the effect of conflict on crop production is not available, available data for rice production in 2012 indicates that actual yield decreased by 43 percent when compared with the amount produced in 2011

Other ways the Malian historic conflict very significantly affects agricultural production negatively include that crop farm facilities and other related inputs became rare commodities because they became more difficult to come by. For example, unlike what was the experience before the conflict when farmers

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63 The Republic of Mali has long been seen as a democratic role model among low-income African countries. However, tensions between the Malian state and the Tuareg independence movements have spurred multiple rebellions over the past half century. The case study from which these findings are drawn focuses on the recent conflict in Mali, which was reported to have escalated dramatically in 2012 and has also been characterized as a two-sided crisis, involving both an occupation by nationalist and jihadist forces and military coup (Kimenyi et al (2014:4).

64 This percentage of the Malian population engaged in the agriculture sector which is the highest provider of employment in the nation is a typification of what obtains across the nations of the Sub-Saharan African region. This provides a stronger supportive motif for the overall ideological stance of our study as was defined from the ons et.

obtained farm inputs such as fertilizers directly from agro-dealers, during the conflict agro-dealers deposited fertilizers at Mopti, which is about 500 kilometers away from the conflict niches and farmers had to travel this distance to obtain needed bags for their work. This accounts for understandable increase in the cost of transportation and ultimately increase in the overall cost of production. As would be expected, many farmers were unable either to go that far or found it rather too difficult to obtain needed quantity of fertilizers. The result of all these was the expected sharp drop in areas of land cultivated and a corresponding sharp drop in yield. On the other hand rebels stole water pumps making irrigated rice impossible; they also short-circuited gas supply, which made gas unaffordable for farmers; the government restricted the supply of urea used in fertilizer production for fear that rebels might use it for the production of explosives; institutions engaged in seed production and multiplication were interrupted; financial resources to implement farm work became unattainable; insecurity loomed large and so discouraged farmers; and in the same token, this constituted high shortage of labor (Kimenyi et al, 2014:9).

10.4.2.1.2 *The Case of Nigeria—The 2013-and On-Going Boko Haram65 Insurgency*

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65 The group now known as *Boko Haram* began to emerge in 2003, when a collection of like-minded Islamists retreated to a remote area of the northeast called Kanamma. Here they violently clashed with authorities. They had been followers of a young, charismatic preacher named Mohammed Yusuf. He had a strict, fundamentalist interpretation of the Qur'an and believed that the creation of Nigeria by British colonialists had imposed a Western and un-Islamic way of life on Muslims. It is unclear whether Yusuf played any direct role in the violence in 2003 and early 2004. He later denied it, saying the youths involved had simply studied the Qur'an with him. Yusuf founded his own mosque in the northeastern city of Maiduguri. Outsiders gradually came to know his Salafist sect as Boko Haram, based on their understanding of his teachings. The most commonly accepted translation of the name, a phrase in the indigenous lingua franca Hausa, is: "Western education is forbidden". It could have a wider meaning though, since "boko" may also signify "Western fraud" or similar interpretations. The group has since said it wants to be known by a phrase that translates to "People Committed to the Prophet's Teachings for Propagation and Jihad". Authorities from a task force known as Operation Flush II in Maiduguri confronted Yusuf's followers in 2009, wounding at least 17 Boko Haram members. Yusuf angrily denounced the security forces and called on his followers to rise up against them. In a violent campaign that stretched some five days they attacked police stations and engaged in gun battles before the military brutally cracked down. Yusuf was eventually captured by soldiers and then handed over to police, who shot him dead. Police claimed he tried to escape when they killed him, but witnesses said he was executed. A video later emerged of alleged security forces ordering people they suspected of being Boko Haram members to lie on the ground before shooting them dead. Around 800 people were killed in this round of violence. Boko Haram went underground for more than a year after the uprising, but re-emerged in 2010 with assassinations and a major raid on a prison. Yusuf's deputy, Abubakar Shekau, who police claimed had been killed in the 2009 uprising, began to appear in videos as the group's new leader. Attacks gradually grew more deadly and sophisticated, particularly with the use of explosives. A suicide attacker rammed a car bomb into UN headquarters in the capital Abuja in August 2011, killing 23 people in the most high profile of several incidents. Such violence gradually became frequent in parts of northern and central Nigeria. The insurgency grew even more complicated when a splinter faction of Boko Haram – later known

Turning their study gaze to Nigeria on the one hand, and using the Boko Haram induced conflict as an illustrative case on the other, Kimenyi et al (2104) found very similar patterns of how conflict inflicts significant negative impacts on agricultural production in Nigeria in particular and SSA in general. In relation to its impact on crop value chain, for example, farmers and all in the affected areas experience "[…] substantial increase in prices for key northern agricultural crop exports to the rest of Nigeria and Cameroon" (Kimenyi et al, 2014:17). This rise in prices is mainly accounted for by decrease in the quantity of agricultural produce; uncertainties at markets; corresponding increase in cost of transportation; and corresponding significant drop in the production of farm crops such as cowpeas, maize, millet, rice and sorghum, which form the main crop base of farmers in the affected areas. All these closely connected effects on crop value chain are in turn precipitated by another chain of closely related factors including 1) labor shortage on both farmers' and laborers' sides; 2) improper and inadequate execution of the stages of crop production; 3) and increase in cost of production as farmers travel longer distances to procure farm inputs such as fertilizer, herbicides and improved seedlings already made more expensive due to conflict-induced scarcity and insecurity (Kimenyi et al, 2014:17-18).

As with crop value chain, the study found that this conflict produced the same or similar impacts on fisheries and livestock value chains. In the same way, the conflict negatively impacts both private and government sectors which provide services that facilitate farmers' activities both in the Nigerian (as with the Malian) experiences (Kimenyi et al, 2014:10-11; 18-20).

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as Ansaru – emerged by kidnapping foreigners. Boko Haram's main faction also started kidnapping foreigners when Shekau claimed responsibility for the abduction of a French family of seven in February 2013 (Mike Smith, 2016).

The findings of the referenced study in relation to the many ways the Boko Haram conflict—like all other conflicts in SSA—significantly impact agricultural production in the region would not be surprising taking into consideration the cases of corroborated reports documenting how thousands of people in Northeastern Nigeria and other areas of neighboring countries are displaced and made refugees; or worse still how the conflict has claimed the lives of thousand people. A few representative instances would suffice for the purposes of this study. According to Sahara Reporters (May 10, 2014), the insurgent group blew the bridge linking the two States of Bornu and Adamawa. By so doing they cut off farming and trading activities not only between the two States but between other parts of Nigeria and its neighboring countries. Overtaken by fear and insecurity drones of farmers abandon everything including their crops, houses, and livestock; those who survived the carnage flee into Cameroon in hundreds and thousands where they became refugees (Sahara Reporters, New York: 05/14/2014). This is in addition to the hundreds and thousands the group killed at various close intervals since its early beginnings in 2013 in Northeastern Nigerian and after its spread to Chad, Cameroon, Niger, and beyond.

In both cases, therefore, the common experiences of farmers were very similar if not the same: all the closely linked effects of conflicts in Mali and Nigeria brought about the overall impact of fall in crop value chain with its attendant food insecurity and increased poverty (Kimenyi et al, 2014:8-10, 17-19).

10.5 *Conclusion: Chapter Summations*

The stages of this chapter of this case study provide some strong findings which are very briefly recapitulated below. These include:

1) Conflict is usually conceived and reacted to usually from the perspective of mutually exclusionary opposition between two or more individuals or groups in which one party or both try to inhibit the other from having access to certain benefits.

2) There is a variety of causes of conflict in SSA including the hang-overs of fragile European colonial legacy; indigene-settler divide over legitimacy and citizenship; intra-inter-ethnic boundary and or land resources disputes over ownership and the right to use with the last of these being the more frequent.

3) Overall, however, we found that none of these causes of conflict stands alone but rather together they form a very intricate landscape of causality that understanding one necessarily entails simultaneous attempts at grasping the others with the view, above all, of gaining insight into their stubborn embeddedness and widespread impact on agricultural development in SSA.

4) On the trail of ways through which conflict negatively impacts the macro and more so the micro economics of agricultural production in SSA, we found the following to be corroborated patterns:

- Conflict creates an environment of fear and insecurity especially in affected areas;

The atmosphere of fear and insecurity thus created threatens farming communities who, as a result flee the conflict locales and their farm settlements;

- When farmers flee conflict-ridden zones in order to save their lives, they live behind their farmlands and all the crops planted thereupon;
- When farmers flee their homes and farm settlements due to conflict, their farms and farm produce in storages are abandoned but often looted by their opponents or other people;

- Conflict therefore produces concomitant effect of discouragement on farmers who produce less either due to fear of attacks or of avoidance of ending in vain cultivation;
- In like manner, conflict forces drones of communities into refugee camps while many more take cover in forests;
- While they are exposed to the horrors of being refugees in their own country or in other neighboring countries they face even harsher faces of hunger, high frequencies of malaria infection, inaccessibility of social services for their integral wellbeing;
- While thousand people are pushed into forced migration and all its inhumanities, thousand others, especially the combating males, die in such violent conflicts;
- Whether they flee or die in the face of conflict they leave behind their weaker and vulnerable family members who also suffer grave conflict-induced assaults;
- Among those who flee into forced migration young men who constitute the pillar of farm labor force take greater percentage;
- Women and girls were found to be most hard hit by conflicts in SSA because they are brutalized with rape and often end in contracting sexually transmitted diseases (STDs) in addition to often losing their male family members to the rage of conflicts;

5) Another level of the complex ways conflict impacts agricultural production in SSA include,

- Intensified food shortage and insecurity with corresponding rise in prices of food stuff;
- Both of these situations are accounted for by the prevailing fear and insecurity in the areas;
- This unnerving situation produces a sharp fall in the quantity of agricultural produce;

- The fall in productivity is in turn jointly caused by the combined factors of reduced area of land cultivated, scarcity or rarity of farm labor and increased cost of agricultural production all of which militate against farmers' motivation to produce;
- The cost of agricultural production shoots up during conflicts partly because farm facilities such as fertilizers, herbicides, insecticides, improved seeds and seedlings among others become harder to access and more expensive when and where they are found at all;
- Market networks at the local, national and regional levels of SSA break down, again due to the air of sociopolitical instability and insecurity generated by conflicts.

6) If life in general is most difficult to live in moments of conflict in SSA it is also because that, in addition to sharp drop in crop value chains, affected populations and indeed the wider population experience sharp drops in the production and supply of fish and livestock value chains as well.

7) While conflict within and especially between contiguous communities in SSA is unavoidable, our study found also that the official government has not done enough by way of installing effective, public-private collaborative conflict management institutions to guarantee uninterrupted, sustainable agricultural production since the agriculture sector employs about 80 percent of the region's population. This makes for urgent policy intervention as we attempt in the last chapter.

Chapter 11: Infrastructure and Agricultural Development in Ukumland, Nigeria

11.1 *Chapter Overview*

The place and impact of infrastructure in the experience of agricultural development in Ukumland, Nigeria is the business of this chapter. Premised on the assumption that availability of adequate and effective infrastructure boosts by facilitating the different ramifications of agricultural development in any region of the world, this chapter explores how the provision or absence of infrastructure affects agricultural development in Ukum-Nigeria. In so doing infrastructure is viewed as one of the factors in the situated context in which agricultural production occurs and, as such, in concert with other factors, is assumed to impact its performance in many and varied ways. It is in this spirit that the aim of this chapter is pursued.

Thus disposed, the chapter unfolds into multiple levels of investigation following the traditional distinction between hard and soft66 types of infrastructure, and how each and all of them together impact the economics of agricultural production. Taking off with a general word on what infrastructure is, and why it is important to factor it into the scientific investigation of agricultural development (in SSA), the investigation gears up into discussing hard and soft infrastructure types but not without anchoring all these on field data as were collected in the course of the research. By subjecting field data to a mix of statistical interpretive analyses, study findings are laid out through which is evaluated the critical role infrastructure plays in the agricultural development of Ukumland and of Nigeria in general. This is done more so by juxtaposing the

66 The distinction between *hard* and *soft* infrastructure is not hard and fast as this depends on what motivates the distinction and where it is being made. On the other hand, the distinction is purpose-driven, depends on the level or complexity of a society's development, and so reflects the motivation behind the differentiation between them. Hard and soft types of infrastructure are technicalities often used to refer to economic and social infrastructure types, which is predicated on what purpose each category serves in the general gamut of a society's development.

findings of this study with what literature drawn from across the SSA region and the world over says on the role of infrastructure especially in the micro economics of agricultural development. The aim of this chapter, therefore, is to show, as many studies have demonstrated, that poor infrastructure or lack thereof in countries of SSA is one of the major factors militating against the performance of the agriculture sector, a major contributor to SSA GDP and the largest employer of its population.

11.2. *Chapter Rational*: *The Nature and Place of Infrastructure in Economic Development*

The Free Dictionary's (2016) definitional statement on infrastructure is two-fold: first, it is rendered as "An underlying base or foundation especially for an organization or system;" second, it refers to "The basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communication systems, water and power lines, and public institutions including schools, post offices, and prisons." Agnes and Guralnik (2006) agree with this two-fold definition of infrastructure. Granted that the first definition of infrastructure as we saw above offers some relevance to the purpose of this study, it is, however, more in the second sense of the term that the concept is applied here. Thus understood, infrastructure is approached as a necessary condition—even if not a sufficient one—for the full and effective functioning of any system, that is, any community or society. In a rather simplistic analogy, the facilities that make up the gamut of infrastructure for a society could be likened to the place and role of the different (major) parts of the human organism—hands, feet, eyes, ears, mouth, and nostrils among others. The logic of this analogical reasoning is that, just as a human organism though alive could not function (well) without these parts, so too it is that a society cannot function (well) without the installation and maintenance of all requisite facilities that are basic and necessary for its productive life. As Button's (2002:1) rather utilitarian, instrumentalist stance on

the issue of the purpose of infrastructure put it, "No one wants infrastructure for its own sake. It is a means to an end."

Insights from the United Nation's descriptive approach to the role of infrastructure in economic growth and poverty reduction in SSA (UN-HABITAT, 2011) bring us to even broader understanding of infrastructure. According to its characteristics-based descriptions, infrastructure is understood as 1) essentially public goods, providing in principle, non-exclusive goods accessible to all; 2) fixed investments, bulky and lump-sum with long (or no) payback periods; 3) having considerable variation in earning power capacity (e.g. telecommunications versus water); 4) output mostly paid for in local currency (less true for ports and airports); 5) until recently the public sector playing a dominant role (finance, regulation); and 6) sensitive to corruption and political shifts (UN-HABITAT, 2011:5).

Continuing, however, UN-HABITAT (2011:5) adds,

> Increasingly, the meaning of infrastructure has been shifting from one focusing on physical fixed assets such as roads, airports, sea ports, telecommunications systems and sanitation (what might be called public utilities). It now often embodies notions of softer types of infrastructure such as information systems and knowledge bases (see also Button67, 2002)

In the broadest definitional understanding of the term, therefore, infrastructure refers to all basic inputs into, and requirements for, the proper functioning of a society's economy (HABITAT, 2011:5); it is also in this sense that it is applied in this study.

It is on the strength of the foregoing on the primacy of place infrastructure occupies in the life of a social group—any social group—that many a scholar see no ray of hope for SSA macro-

67 Button's study, which focused on "Effective Infrastructure Policies to Foster Integrated Economic Development"—and thus was predicated on the infrastructure-economic development ideological framework—used transportation infrastructure to make the case that successful—and one might add appropriate—policy "[…] must invariably embrace the terms on which people have access to infrastructure as well as the scale and nature of the infrastructure itself" (Button, 2002: Introduction-1).

economic growth and more so for its micro-economic development (in the sense of agricultural performance) without the installation of functioning infrastructure. As Pinstrup-Anderson and Shimokawa (2006:2) state,

> Failure to accelerate investments in rural infrastructure will make a mockery of efforts to achieve the Millennium Development Goals in poor developing countries while at the same time severely limit opportunities for these countries to benefit from trade liberalization, international capital markets, and other potential benefits offered by globalization

Following this ideological posture, many studies have examined and emphasized the impact of infrastructure in Nigerian and SSA agricultural development but often by focusing on one particular infrastructural facility as can be seen in those dedicated to exploring road/transport infrastructure including Button (2002), Banerjee et al (2009), Inoni and Omotor (2009), Olagunju et al (2012), Ogunsanya (1981), Tunde and Adeniyi (2012), Bryceson et al (2008) among others. However, looking beyond the specific gaze of these and other studies—yet not diminishing but affirming their important contributions—the *World Development Report* of the World Bank (1994) makes a more inclusive observation on the supreme role of infrastructure, stressing that focusing solely on increasing the quantity of installations of infrastructure was not adequate, but that more should be done on the quality and efficiency of related services.

11.3. *Types of Infrastructure: Hard and Soft*

The research community busy with exploring the infrastructure-economic development and poverty reduction framework usually makes a two-type division of hard and soft infrastructure. This does not, however, undermine or dichotomize their inner logic nor jeopardize the integral importance which all infrastructure facilities share in common. As Jouanjean (2013:5) observes,

> Investments in rural infrastructure should be addressed in terms of a more holistic approach, and should consider complementarities between hard and soft-otherwise called logistic-kinds of infrastructure […] rather than addressing each topic in solis

Hard infrastructure is generally defined as the provision of basic utilities such as water; gas; electricity; transportation networks that include roads and bridges; community facilities and public buildings (Zakariya, 2012; Casey, 2005; Kumar, 2005). These infrastructure types "[…] are often necessary in determining how certain spaces might operate and are utilized" (Zakariya, 2012:76). According to Casey (2005), though soft infrastructure is intangible, it however "[…] involves responses to both the needs of communities, while simultaneously building the capacity of local people and groups to respond to current and future needs" (p.8).

This purpose-driven classification also explains why a further "division" is made between economic and social infrastructure. Economic infrastructure is sometimes regarded as part of an economy's capital investment meant to serve the purpose of facilitating economic production. It is also sub-divided into three categories: 1) utilities such as power, piped gas, water and sanitation, telecommunications, sewerage and solid waste disposal; 2) public works including roads, water catchments in dams, irrigation and drainage; and 3) transport sub-sectors consisting of railways, waterways, sea ports, airports, and urban transport systems. Social infrastructure, on the other hand, comprises services including but not limited to health, education and recreation (UN-HABITAT, 2011:6). We have tried to craft a table (12.1) below to reflect these classifications.

Table 11.1*: Classification of Infrastructure into Hard and Soft, Economic and Social Types*

Hard Infrastructure	**Soft Infrastructure**	**Comments**
Transport (ports, roads, railways)	Policy	1) Whereas hard infrastructure refers to physical structures or facilities that support a soceity and its economy, soft infrastructure refers to non-tangibles supporting the development and operation of hard infrastructure.
Energy (electricity generation, elctrical grids, gas, oil pipelines)	Regulatory	
	Institutional Frameworks	
Telecommunications (telephone, internet)	Governance Mechanisms	2) These two broad classifications of infrastructure also reflect in the further two-fold economic and social infras-structure (and their sub-divisions) represented on the basis of the purposes they serve
	Systems and Procedures	
Basic Utilities (water supply, hospitals, health clinics, schools, irrigation, others)	Social Networks	
	Transparency and Accountability of financing procurement systems	

Overall, while economic infrastructure falls within the concept of capital investments aimed at facilitating and catalyzing economic production, the facilities classified as social infrastructure are the social services which keep human agents (and their environment) in good quality of life in order to effectively operationalize economic infrastructure for higher and better productivity, and for the integral functioning of society. This classificatory model provided this study the lead to collect data aimed at helping for better understanding of how the availability of infrastructure or lack thereof impacts agricultural development in Ukumland, Nigeria.

11.4 *Tracking Infrastructure in Light of Agricultural Development in Ukum-Nigeria*

Data collection for the business of this chapter is predicated on, and sustained by, the foregoing hypothetical assumption—that there is a direct correlation between infrastructure and agricultural production. The fact that items of infrastructure—hard and soft—are very easily observable made for strong dependence on direct observation in addition to data gathered from the application of interviews and questionnaire study techniques. Analysis of field data was based on the hard-and-soft categories laid out earlier seeking also the interrelationship between all infrastructure facilities in order, hopefully, to find out how they individually and collectively impact agricultural development in Ukumland and other communities of Nigeria.

11.4.1 *Data on Hard Infrastructure in Relation to Agricultural Development in Ukum-Nigeria*

Engaging 25 questionnaire respondents the study examined farmer's experience on how the availability or non-availability of hard infrastructure affects them in their farming activities. The data thus gathered are displayed in the table and chart (12.2) that follow.

Table 11.2: *How Hard Infrastructure Impacts Agricultural Development in Ukum-Nigeria*

Questions	Yes	No	Declined	Total	Yes	No	Declined
Do you think infrastructure helps farmers boost agricultural production?	25	0	0	25	100.00%	0.00%	0.00%
Do you have regular and effective supply of electricty in your LGA?	0	25	0	25	0.00%	100.00%	0.00%
Do you have good road networks to facilitate your farming activities?	0	25	0	25	0.00%	100.00%	0.00%
Is your community provided with medical care and hospital services?	0	25	0	25	0.00%	100.00%	0.00%
Do you have regular and clean water suply in your community?	0	25	0	25	0.00%	100.00%	0.00%
Does the government provide farmers with irrigation equipment?	0	25	0	25	0.00%	100.00%	0.00%
Do agricultural extension services agents come to educate farmers?	0	25	0	25	0.00%	100.00%	0.00%
Does the government provide farmers with facilities like fertilizers?	4	21	0	25	16.00%	84.00%	0.00%
Are farmers provided the assistance of credit facilities in your LGA?	0	25	0	25	0.00%	100.00%	0.00%
Are your markets equipped with facilities like clean water and toilets?	0	25	0	25	0.00%	100.00%	0.00%
Are farmers provided with improved farming technologies like tractors?	0	25	0	25	0.00%	100.00%	0.00%
Do farmers get such other assistance as improved, high yielding seeds?	0	25	0	25	0.00%	100.00%	0.00%
Do you have effective communication systems like telephone services?	23	2	0	25	92.00%	8.00%	0.00%
Is there an agricultural research institute to help farmers in your LGA?	0	25	0	25	0.00%	100.00%	0.00%
						Representation of Values in %	

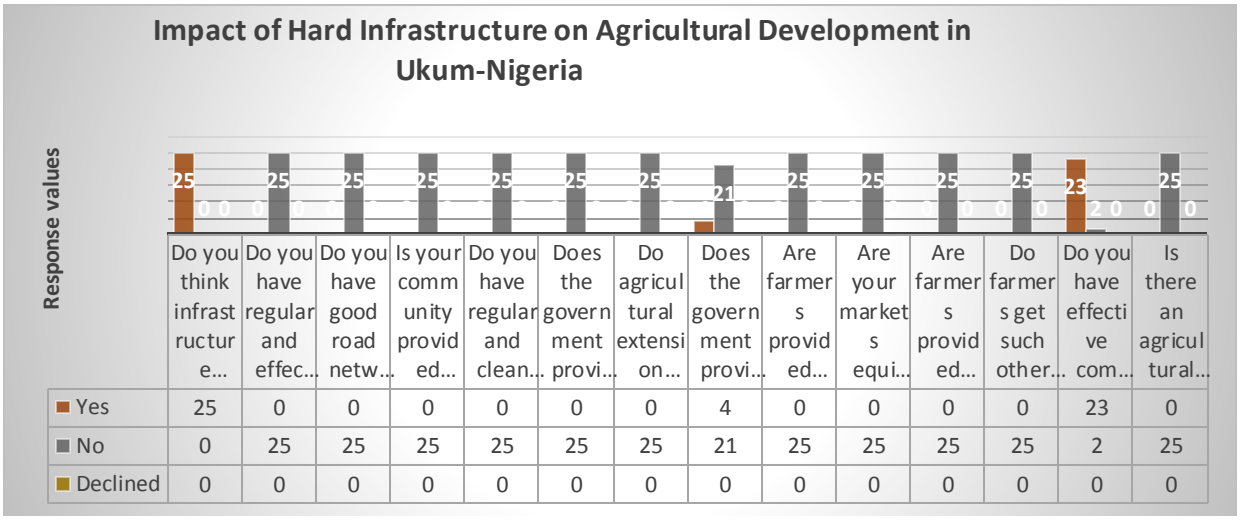

Chart 11.1: *Impact of Hard Infrastructure on Ukum-Nigerian Farmers*

11.4.2 *The Impact of Soft Infrastructure on Agricultural Development in Ukum-Nigeria*

The area that was challenging in making scalable harvest of data was soft infrastructure. From preliminary discussions with farmers (and traders) in view of formulating interview and survey questions, it was discovered that many of the would-be respondents did not (fully) understand the make-up components of soft infrastructure including but not limited to policy, regulatory, institutional frameworks, governance mechanisms, systems and procedures, social networks, transparency and accountability of financing and procurement systems. However, by

applying thematic discussions of some items that very easily speak to farmers' daily concerns some breakthroughs were registered leading to good results as are represented below.

First, on the issue of policy measures that ordinarily should be democratically shaped in order to put the production interest of farmers in focus, at least 23 of our 25 respondents stated that they do not believe there are any such functioning policy instruments in place in their community. Whereas 22 out of 25 respondents denied seeing any effective governance mechanisms such as security and conflict management instruments in their communities, all 25 participants overwhelmingly stated that there is nothing like transparency and accountability systems in the governance of their LGA. As if representing a majority opinion, a secondary school teacher-farmer elaborately states:

> Well, as far as I know, there is nothing like transparency and accountability in our government officials who, by the way, are self-appointed because, the truth is that no free and fair electoral process is followed to vote them into the offices they occupy. It is a matter of what connections you have and how much money you can throw around to influence the mind of your likes. It is all about the exercise of raw force to get into office to loot public funds, and not about public interest. If somebody was not democratically voted into office because he could overpower everybody, how do you expect him to be transparent and accountable in office? Who is he going to be accountable to? Nobody renders any account. All that happens is that each group that comes in loots every bit of money that comes for the development of our community; another set comes and does exactly the same thing and even worse. Only those who are close to them benefit from this corrupt scheme (Fieldnotes: August 24, 2014).

To buttress the full-throated magisterial claim of the last respondent, his friend who also identified as a teacher in addition to being a major yam grower added some noteworthy point on the indices of corruption, lack of accountability in what he described as "[…] this free land where those in public offices do whatever they want and get away with it forgetting us poor farmers" (Fieldnotes: August 24, 2014). He followed this assertion up with gesturing to many roads leading to the hinterland farm settlements which, according to him, have attracted several contracts awarded to different sets of people but with no roads built. To conclude he added,

> The reason the contracts are never done is not because there is no money to execute them.

> The reason rather is that those at the State and LGA levels award the contracts to those with whom they share the money and what can anybody do since they are in power? That is why we do not have good roads to facilitate our farm works which we should be enjoying if we had any systems of good governance. That is also why we do not have electricity, no water, no government hospitals. In short we do not have anything! Does what I just said to you in any way represent accountability? Would you call that good governance?
> (Fieldnotes: August 24, 2014)

Those few responses well represent the sentiments and knowledge of Ukum farmers; to a large extent their views strongly suggest what obtains in other parts of Nigeria and SSA at large.

11.4.3 *Infrastructure: Evidence from Direct Field Observation*

In this sub-section data from direct observation are factored in and focus on two areas: first, infrastructure in general; and road/transportation infrastructure in particular used as an illustrative case. With the use of tables each area is summarily represented.

11.4.3.1 *Field Experience on Infrastructure in General*

Table 11.3: *Data from Direct Observation on Infrastructure in General in Ukumland*

Infrastructure Type	Observations	Comments
A. ***Telephone***	1) It was available but predominantly weak	
	2) Its availability depends of location:	
	those along the main roads and around the Zaki-Biam market	
	have better service that is, however, non-available; those	
	in hinterland settlements usually have no service--this was our	
	common experience in the rural hinterlands we studied	
B. ***Internet***	1) Non-available in the farm settlements where we lived and studied	
	2) We had access to the internet at the Zaki-Biam yet with difficulty	
C. ***Electricity***	1) We never had access to elctricity in all the hinterland communities	In the Mbaterem
	where we lived and there were no grid lines at such places too	area, however, grid
	2) We saw electricity only around Zaki-Biam and Sankera--the main	lines were coming
	commercial area and the LGA capital respectively	at the early stages
D. ***Water***	1) In no part of the whole Ukum LGA did we observe clean piped water	
	2) In some places we saw poorly covered hand dug wells	
	3) Around Zaki-Biam there were bore holes sunk by a few individuals	
	and purely for business purposes such as water bottling companies	

Personal field experience on the availability (and effectiveness) of infrastructure and its impact on farmers and their environment overwhelmingly confirm farmers' responses. As the table (11.3) above shows, there was telephone service; however, it was worse than respondents represented. It is a matter of where one is located at any point in time: along the major roads and

around the Zaki-Biam main market with the installation of many telephone masts, the connection is relatively strong. This very adversely affected researcher's ethnographic penetration of intended areas; it also negatively impacted collaboration with study guides, farmers and traders.

For the same reason of poor telephone connection it was observed that on days when conflict broke out within and between communities or armed robbers attacked farmers on their way to the market, poor telephone connection prevented good dissemination and coordination of information between civilians and the police, and between people around the markets and those at home who could have been stopped getting into the market that was disrupted for the said reason. In the end people wasted both time and money going to the market in addition to risking their lives.

The above was also the field experience with internet service: no emails could be sent out; researcher could not connect to fellow students who were either at school or in the field at other parts of the world in order to share information and compare field experiences. To try one's luck on this took the rounds of long driving through the often impassible terrains to Zaki-Biam for internet service one was not sure would be available. This constituted major study drawbacks.

Throughout the study duration there was no access to electric power in the farm settlements where the study occurred except when one drove out to Zaki-Biam and Sankera centers as the main commercial city and LGA Headquarters respectively. There were no grid lines into the Mbatian and Mbaterem communities where the study happened alternately. As phones were recharged and made copies of questionnaires were made only by driving to the Zaki-Biam area. In like manner nowhere in Ukumland did the study find clean, pipe-borne water or modern public toilets at the marketplaces. No farmers were observed being assisted with improved farming technologies and high yielding seeds. There were no government medical centers except the one and only one-block clinic cited between Zaki-Biam and Sankera which, however, had no equipment, no professional

medical personnel, and no drugs. It was a daily experience and observation to see farmers who were sick but could not help themselves with any medical treatment—because they could not afford it. The study did not observe any security facilities and State conflict management apparatuses except for police check-points along the major roads where commercial motorists, farmers and traders were stopped and money coerced from them. Combing through other Nigerian farming communities led to the same observed results of the absence of basic infrastructure.

11.4.3.2 *Field Experience on Road-Transport Infrastructure Specifically*

Over and above direct observation on infrastructure in general close and particular attention was paid to the nature of road and transport network in and around the study site; the results were compared with findings from other studies on the matter.

Table 11.4: *Data from Direct Observation on Road Networks Infrastructure in Ukumland*

Road Types	Nature and Purpose	Comments
A. ***Trunk "C" Roads***	1) Bushy, winding pathways linking compounds to farmsteads;	The compexity of these
	2) Serve as escape routes during conflicts, raids, and hunting	tributary linkages depends on
	3) Link villages to villages and to larger communities	the community and the kind of
	4) Link larger communities and their neighboring ethnic groups	subsistence activities it does
B. ***Trunk "B" Roads***	1) Wider, motorable, but untarred;	Found along and in between
	2) Usually muddy, slippery and waterlogged in the rains	the villages and communities
	3) Used by vehicles of all capacities for conveying farmers,	they connect are markets that
	traders and their goods from location to location	are usually small in size and in
	4) Serve as major links between major and minor markets	operations. They are at times
	5) Given surface scraping once in an irregular period of years	maintained by the villages and
		communities they run across.
C. ***Trunk "A" Roads***	1) Usually tarred but without drainage/gutters	At the points where this road
	2) Few in number and usually single lanes	category meets with Trunk "B"
	3) The tarring is usually thin-layered and so easily peal off	feeder-roads there are usually
	4) Not usually maintained and so with many deep potholes	found small and at time big
	5) They usually link States to States and LGAs to LGAs	markets where indigenous
	6) As such Trunk "B" and sometimes Trunk "C" roads surge	farmers meet themselves
	into them from the hinterland farm settlements	but more so with their foreign
	7) They usually cut across main markets Nigeria as in all SSA	customers for market business

Study site field experience of road networks infrastructure was as deplorable as the others. There were observed different grades/types of roads which have been reduced to three categories: 1) Trunk "C" Roads: bushy, winding pathways leading to and from homes to farms and markets; 2) Trunk "B": wider, motorable but untarred roads through which vehicles of all capacities convey people and goods from villages to markets; usually muddy, slippery and waterlogged in the rains;

3) Trunk "A": few "major" tarred roads that are usually poorly maintained: these are the state-state and LGA-LGA connecting roads through which people from all parts of the country converge at major markets such as Zaki-Biam and Kaydo both of which are along the Katsina-Ala and Wukari major road leading inland to Northern Nigeria. Ogunsanya (1981) also found this kind of three-tier of roads in his study of road networks in Kwara State of Nigeria.

The three categories of road as were found in and around Ukumland give an opportunity for some brief analysis based on the morphology and physiognomy of rural road networks, and how they impact agricultural production and market activities in SSA. Using the Kaydo-Mbatsavazun-Rafi-Nkada road network as an example, some approximation of how these three categories of roads work is represented here. Between Kaydo and Rafi-Nkada through Mbatian villages is a local, winding, unpaved however motorable road. Tens of small and big roads surge into and out of it as people travel from one end to the other. These village trackways—sometimes over four miles to hinterland farm settlements—constitute not only linkages between communities and local markets but also serve as the main and only connection to the three major markets—Zaki-Biam, Kaydo and Rafi-Nkada—for the disposal of agricultural and goods and services.

Plate 11A: *A Group of Children Headed to Rafin-Nkada Market: A Two-Hour Trekking*

As can be seen from the figure above (Plate 11A), over 85% of the people of this area carry their usually heavy loads along this long distance to the aforementioned and other markets. Only a few of them move themselves and their goods on motorcycles, taxi cars or pick-up trucks to and back from the markets. Those who use taxi cars or pick-up trucks usually combine themselves and their goods in good numbers per vehicle as is typified in the Plates11B and 11C below.

Plate11B: *Farmers and Goods Return from Farm.*

Plate 11C: *Farmers and Goods Head to the Market*

Each of these farmers on the trucks pays at least one-tenth of the proceeds realized from the sales of their goods. This does not include other revenues they pay at the markets and on transportation back home. Researcher followed (drove behind) these trucks from where they assembled at Ukpen village till the truck driver loaded and moved the farmers and their goods to the Kaydo market along the Wukari-Katsina-Ala major road.

Inquired from some women if they are able to afford their family needs and have some savings after paying their transport costs, one of them said, "Who cares about making any profit or savings? All we strive for everyday is to see if we could buy small, small things we need" (Fieldnotes: September 29, 2013). Another woman quickly followed up with an additional note: "Yes, that is what we do all the time; we just manage to survive after working so hard" (Fieldnotes: September 29, 2013). Those two responses are a representative summation of 8 out every 10

farmers interviewed the same and other days, which points to the frustration of farmers and traders in relation to how bad roads puts heavy burdens of costs on farmers' production inputs.

Changing the nature of the questions to ascertain why drivers charge farmers so exorbitantly, the uniform answer this study gathered was that the nature of the roads they put their vehicles through makes the automobiles break down very frequently; so, they too incur high costs of maintenance which they try to recover by hiking transportation fares (Fieldnotes: September 30, 2013). Farmers who otherwise prefer to trek to and back from the markets on foot use long and winding bush (trunk 'C') paths; they return very late, and are totally worn out to do anything. The reason they trek is to save some money that otherwise would have been spent on transport.

Overall, therefore, a major finding of this study is that road transport imposes very high costs on farmers' total production inputs, which reduces their after-sales net income. Understandably, this daily experience discourages and eats away farmers' production incentives as they are left with close nothing at the end of it. Random talks beyond Ukumland show that the responses of Ukum rural farmers and traders and those of commercial transporters represent the experience of people from other rural Nigerian communities and across SSA.

Groping for the cause/s of the poor road networks condition, all study informants—migrant-settlers, farmers, traders, transporters—agree that government neglect or total failure is the main problem. The frequently repeated question of the people was: "Of what use is it that the major roads linking the States and LGAs are tarred if those of us producing the food in farmlands are abandoned without roads?" (Fieldnotes: September 29, 2013). As a young male farmer put it,

> If the government gives us good roads, many of us will become rich farmers and have good houses and cars! We are poor because we have no roads and so many of us go over to cities because we do not seem to have any reasons to stay here going through the same thing every time and still remain very poor (Fieldnotes: September 29, 20130).

In this response the young man informs this study that bad road networks (and lack of other infrastructure in general) is a major reason many people, especially young adults, leave rural areas in search of better conditions of life in cities. This insight taps into and adds to the socioeconomic and political underpinnings why such agrarian communities experience rural-urban migration, a phenomenon which in turn worsens the problems of food shortage and insecurity. In addition to many other insights the statement of this young male farmer cited above is that poor road network and bad condition of rural roads make agricultural production for Nigerian rural farmers a mere drudgery. Second, and for the same reason, car and truck drivers themselves incur high running expenses in maintaining their vehicles; in turn they hike up transport fares for farmers. Third, the rural roads are in poor condition because of government neglect or total failure. Fourth, continuously producing agricultural goods without seeing their socioeconomics improve frustrates and forces many young adult farmers into migration to urban cities. Fifth, the fact of this forced migration works in concert with other findings of this study to explain why agricultural productivity (supply) is always far less than consumers' need (demand): farmers produce far lower than their production capacity. Sixth, together, these problems produce a telling negative effect of high prices for food stuffs on the one hand, and a correspondingly high amount of money Nigeria spends annually on food importation in order to make up for food shortages, on the other. A typical example is that of the importation of wheat: Nigeria sinks in a whooping sum of US$11 billion annually. As has been documented,

> The Federal Ministry of Agriculture has admitted that the country's yearly $11 billion importation bill to meet the staple foods need of Nigerians is troubling [….] This is a very sad situation. We spend $11 billion annually strengthening other nation's economy instead of investing this staggering amount into programmes that have the ability to transform and drive economic development. Nigeria has a population of about 80millon youths, where about 75 per cent of them are underemployed. (Osagie, This Day: July 15, 2013).

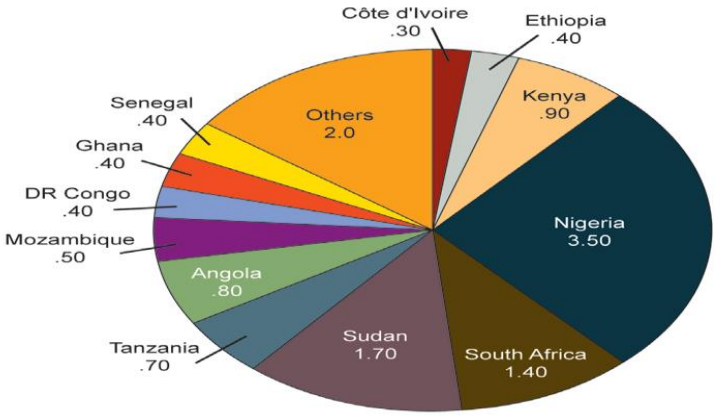

Fig. 11-1: *SSA Wheat Imports for 2010 (in million tons); Source: FAO, 2010.*

Just exactly one year after that news headline, another national daily reported that "Nigeria spends N1.3trn annually on food importation" (Vanguard, June 24, 2014) therefore confirming that the situation was getting no better. As can be seen from the above pie chart (FAO, 2010) on the importation of wheat alone, Nigeria stands highest among other countries of the region. According to "Wheat Import Projections Towards 2050" of the US Wheat Associates (2011), "With the region's high population growth rates and low food consumption per capita levels, food insecurity is a constant threat in Sub-Saharan Africa." The above situation is also applicable to Nigeria's and other SSA countries' heavy dependence on the importation of many other food staples. While it is true that "Nigeria is by far the largest producer of food staples in West Africa and exports to neighboring countries (millet, sorghum, and yams)," it is also a more staggeringly shocking truth that,

> Among West African countries, it is also the one that imports the most food (in particular grains) to satisfy urban consumption needs (accounting for 36 percent of Economic Community of West African States (ECOWAS) food imports) […] while domestic production provides the food for Nigeria's urban areas, the country has a deficit in rice and wheat. Every year Nigeria imports more than one million tons of rice, making it among the largest rice importing countries in the world, and more than two million tons of wheat flour (World Bank, 2012)

Seventh, and from another but related perspective, it is understandable why this cyclic effect of poor road condition in relation to food production in rural parts of Nigeria lowers the

contribution agriculture makes to its GDP performance. This situation invariably accounts—at least partly—for why poverty reduction strategies in Nigeria have remained mere rhetoric. As a result of the same problem, many would-be investors in agro businesses are turned away: this is in consideration of the fact that, with the poor road and transport conditions, there would be high production costs and poor distribution responses in light of demands for their products.

As a result of the last point, the farming communities of Ukumland researched in this case study have remained without other infrastructure facilities especially electric power and portable water to foster rural community development. This is more so the case bearing in mind that no one infrastructure—hard or soft—works alone but in concert with other types for holistic community development and successful market integration (Jouanjean, 2013:5). All this amounts to stating, on the strength of study findings, that as long as the road infrastructure lags behind in Ukumland-Nigeria as in other parts of SSA, so too would other parts of the community's integral development lag behind. This is so because, the establishment of schools, small businesses, agro-based industries, mechanized agriculture, local markets, and other private sector investments lag behind or are totally absent because of the inaccessibility of the place and the high costs involved even when some investors dare to try at all. All these cases reflect foregone increase in agricultural production in the rural communities of Nigeria. Finally, and on account of the foregoing, poverty incidence in rural Nigeria as in other parts of SSA is on the increase. As Segun et al (2008:159) had observed,

> Over two-thirds of Nigeria's population resides in rural areas. Increasingly, poverty in the country is wearing a rural face. From 28 per cent in 1980, poverty among the rural population grew to 52.4 per cent in 1985, and rose to 69.8 per cent in 1996.

This puts a big, curious and urgent question on the possibility of realizing the United Nation's Millennium Development Goals which, in sum, targeted "[…] halving poverty and

malnutrition from their 1990 levels over a twenty-five year period by 2015" (Fan, 2004:1; see also Fan and Chan-Kang, 2005; Fan et al, 2000). That this projection is still a far-fetched dream in Nigeria as in many parts of SSA is traceable to the fact of government failure in the installation and maintenance of good road networks and other infrastructure facilities.

11.5. *Overall Data Analyses: Impact of Infrastructure on Agricultural Development in Nigeria*

Based on responses to questions on how both hard and soft infrastructure impact agricultural production in Ukum-Nigeria in addition to data from day-to-day direct observation some overall analyses of our field data is undertaken here. First, all 25 respondents (100%) concur that the installation and maintenance of effective infrastructure directly facilitates the boosting of agricultural production. Paradoxically, all 25 study participants (100%) stated that their communities lack the same basic hard (economic) infrastructure which they overwhelmingly indicated as absolutely necessary for sustainable agricultural production including but not limited to electricity, good road network, health and medical care services, water supply, irrigation equipment, and agricultural extension services. Similarly, all 25 farmers (100%) stated that the official government does not provide them with credit facilities; that their markets are not equipped with toilets and clean water; they have no access to improved farming technologies and high breed seeds; and that there is no agricultural research institute serving their farming communities. On the question of the provision of such farming facilities like fertilizers, only 4 out of 25 participants (16%) admitted ever receiving such assistance at subsidized prices; this number contrasts with the however encouraging number of 23 out of 25 (92%) who admitted having access to telephone services by which they meant personal, mobile cell phones.

Upon engaging farmers in follow-up interviews the study gathered specific ways lack of effective infrastructure affects agricultural production including but not limited to the following:

a) Farmers incur high cost of production especially through transport fare due to bad roads;

b) Farmers spend more time trekking to farms and markets aiming to save some after-sales money;

c) They lose a lot of produce especially yams and fruits for lack of improved storage devices;

d) As a result of poor storage farmers bring to the market goods of poor quality that less competitive—locally and internationally—and so net less money from the sales;

e) Farmers suffer handicaps having no access to improved technologies and high yielding seeds;

f) With no assistance of credit and other facilities farmers produce far below their potential;

g) With no agricultural research institutes and no agricultural extension services to provide farmers with updated knowledge of farming techniques, farmers operate at levels of production that cannot meet up with the food demands of an increasing population;

h) Farmers also suffer major setbacks without any functioning clean water supply and no medical care services for quality health;

i) Farmers who must use strong and sustainable supply of electric power to function well also face discouraging challenges that retard agricultural production;

j) In addition to these, many people, usually the youth, migrate from farming areas to urban cities in search of opportunities that offer better living standards.

Study results point to one common consequence: Nigeria is backward in the installation and maintenance of both hard and soft infrastructures. As would be expected, this situation significantly affects farmers and the entire country in many negative ways. Greater part of these issues has been analytically documented in chapters 7 and 8 of section 3 where we examined farmers' experiences in relation to labor and capital provisions especially in relation to adoption and non-adoption of improved farming technologies.

11.6 *Appraising Study Findings in Light of Other Studies*

11.6.1 *Economic Development-Agricultural Production-Infrastructure Framework*

A wide range of literature focused on the trio infrastructure-economic development-poverty reduction framework usually begins with making the persuasive argument that the economies of low-income regions of the world such as SSA are predominantly dependent on agricultural production which, the argument concludes, necessarily requires effective infrastructure. This is predicated on the fact as Jouanjean (2013:3) represents it:

> Agriculture constitutes an important part of most low-income countries' economies and is generally the primary source of income in rural areas both directly through crop production and indirectly through on-farm and off-farm employment in agriculture related industries.

The Agriculture and Food Organization of the United Nations (FAO, 2009), Oyejide (1993) and Platteau (1996) further with the rational of this framework by teasing out details to the effect that agriculture is Africa's most important sector, accounting for a large share of her GDP (between 30 and 60% in most countries), employment (about 70% of the labour force) and external trade (well over 60% of export earnings, except in countries where minerals and metals are significant sources of foreign exchange). With an eye on its capability to improve people's socioeconomics, FAO (2005) and Segun et al (2008) state that rural infrastructure plays a crucial role in poverty reduction, economic growth and empowerment for the African poor.

Placing demographic distribution of SSA population alongside the production capacities of rural dwellers on the one hand, and targeting the impact of infrastructure on agricultural production and trade of agricultural produce on the other, DanChurchAid (2008:1) writes:

> Agriculture is key to employment, growth and poverty reduction in Africa. It is by far the most important sector for any reform agenda in Africa. But it is largely overlooked in development policies and programs. While 75 per cent of the world's poor live in rural areas in developing countries, only 4 per cent of official development assistance goes to agriculture (See also Ake, 1996)

The grand conclusion of all these linkages, as study findings and other sources point to, is that it is impossible for the goals of economic development in general and increased agricultural production in particular to happen and produce the much desired defeat of hunger and poverty (MDGs, 2000) without the installation and maintenance of adequate and effective infrastructure of all types especially in the rural areas of SSA where agricultural production is the predominant occupation. The United Nations (2008) underscores the absolute necessity of infrastructure for development and at the same time laments Africa's backwardness in it:

> The lack of modern infrastructure is a major challenge to Africa's economic development and constitutes a major impediment to the achievement of the Millennium Development Goals (MDGs) and other vital objectives, such as revitalizing agriculture (UN, 2008:1)

Getting to details of the African infrastructure challenge, the UN (2008:1) continues:

> From rural roads, railways and harbors to irrigation systems, telecommunications, clean water, sanitation, energy and such basic social infrastructure as health, education, banking and commercial services, hundreds of millions of Africans lack even the most fundamental amenities. This is particularly true in rural areas, where the majority of the continent's 920 million people live. The burden also falls most heavily on women, who often must spend hours collecting wood for cooking and heating in the absence of electricity. Rural women walk an average of 6 kilometres daily to rivers and springs for want of piped water and wells

Emphasizing the connection between economic development, poverty reduction and infrastructure installation, FAO (2006:3) points out that some of the major constraints hampering agricultural development in SSA include insufficient investment in infrastructure, high transportation costs, weak information systems and a poor regulatory framework; these same problems also incapacitate investment and specialization in new and high-value products. Continuing with this point FAO (2009:1) argues that increasing agricultural production in SSA has been hindered because the requisite infrastructure to realize this goal is lacking. Along the same line the World Bank Global Development Network (WB-GDN, 2012) identifies insufficient agricultural and development infrastructure, lack of access to sufficient agricultural support services, and high transaction costs and institutional factors as some of the "[…] main factors

hindering successful commercialization in Sub-Saharan Africa [….]" (p.1). Laying out the core of its argument WB-GDN (2012:1) writes:

> Public investment in rural infrastructure and other rural public goods is essential for the private sector (both farmers and traders) to operate effectively. If African governments fail to make such investments, rural development and poverty alleviation goals will not be achieved. Lack of such investment is the most binding constraint to agricultural commercialization in most locations

Against this background, the FAO (2005:3) adds a note of odds stating that, "[…] insufficient investment in infrastructure" and its attendant consequence of "high transportation costs" constitute terrible constraints to agricultural development and make the struggle for food security in SSA a far-fetched dream. Following this study tradition, present-day students of agricultural production and community development, as typified in the studies of Haggblade et al (1989); Reardon et al (1999); Hettige (2006) among others, constantly emphasize the need for good infrastructure in general and road infrastructure in particular.

11.6.2 *Road Networks and Local, Regional and Global Trade Relations*

Going back to the antiquities of economic anthropology and related fields scholars like Herskovits (1952) unfailingly recognize this middle course of the distribution of agricultural goods and so underscore the place of road infrastructure in the process. Robert Bates (1981) also recognizes the importance of feeder-roads in his account of Ghana's economic struggles. Looking back into anthropological archives of knowledge, this study found strong corroborations from very early studies of this kind to the effect that, rural community routes—as were found in Ukumland and other parts of rural Nigeria—are a common phenomenon and usually existed for reasons of social intercourse and economic exchange, and are also found in other parts of SSA and the world. The essence of this archaeology is to cast a contrasting shadow between what this case study found in present-day Nigeria in relation to road/transportation infrastructure and what is known from the legacy of ancients on the same note. The overall aim of this inclusion is to show how far the 21st

century Nigeria and other nation-states of SSA are far from allowing themselves to be challenged by in order to at least follow and approximate the legacy of ancient civilizations on this matter. Numelin (1950), for example, presents facts which date back to antiquity all of which border on how economic trade has been continually connected with the establishment of rural pathways and roads over time. Commenting on how ancient road networks were connected with trade and markets and hence enhanced social intercourse, Numelin (1950:253) writes:

> Practically throughout the primitive part of the Australian continent—especially among the exogamous-totemic tribes—there has been since ancient times a network of trade-paths and ways, along which the objects of trade have moved tribe to tribe. And this exchange had nothing to do with violence or robbery any more than barter in the primitive world in general

As tribes gradually overcame and grew out of, and beyond, the psychological confines of their self-made little worlds—fears about, and hatred for, other tribes—they gradually woke up to the consciousness that, "No tribe, however wide their territory was, was entirely self-supporting" (Numelin, 1950:259).

This brings us, at least, to some snapshot of the history of the origin of trade on the one hand, and how this history developed simultaneously with the evolution of rural pathways and roads linking communities that ordinarily had been isolated from each other often for reasons of fear and suspicion as Numelin (1950) documents. This goes to underscore the complex connection between the development of economic exchange, the division of labor understood in the sense of specialization as part of the explanation behind it (Durkheim, 1984), and finally the role played in them by rural pathways and roads. The ancients were well aware of this social fact and so followed it with the construction of roads, waterways, and later railways in modern history all aimed at relating to, and trading with, other communities in those goods and services in which they do better

than others by the laws of comparative advantage68 understood as "The advantage conferred on an individual or nation in producing a good or service if the *opportunity cost* of producing the good or service is lower for that individual or nation than other countries" (Krugman and Wells, 2009: Glossary G-2).

From the foregoing, it is historically evident that the development of economic exchange cannot be fully appreciated without simultaneously appreciating the most crucially important role rural pathways and roads have continually played in it. This is true whether we are referring to economic exchange in the senses of gifts and ceremonial exchange (Herskovits, 1952:155-169); or reciprocity as "the obligatory gift-and-counter-gift giving" (Dalton, 1971:131); or silent trade69; or trade by barter purely for the exchange of objects (Herskovits, 1952:180); or finally, market trade where all-purpose money engineers every aspect of the market economy at the local and international spheres.

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68 *Comparative advantage* is the ability of a firm, an individual, or a community, to produce goods and services at a lower opportunity cost than other firms, individuals or communities. Since selling price is determined by the total cost of production all other things being equal, comparative advantage gives a company, an individual, or community the ability to sell goods and services at lower prices than its competitors and so realize stronger sales and more profits. The connection of this to our point above is that comparative advantage is often associated with and is also significantly shaped and determined—especially in agricultural goods producing niches—by facts of geographical differences which make some places better disposed naturally and otherwise than others with higher advantages than others; this invariably means such places would produce at lesser costs of production. In the end, therefore, this occasions and sustains specialization and logically the social intercourse of trade and commerce among others. All said and done, the specialization in production and the comparative advantage that factors into it are not sufficient to make the intercourse of economic exchange between communities and nations—past and present—to happen without easily accessible and safe road networks, which is the point of this inclusion in the first place.

69 *Silent trade*, according to Numelin's account (1950:264), is the type in which "[…] the one party brings goods (food, implements and the like) not to the village of the other, but to a neutral place, perhaps on the boundary, and leaves them there to be inspected by the other, who leaves their goods for approval beside them. The first party then returns and, if satisfied, takes the strangers' goods and goes away; finally the second party comes and takes the goods left by the first. Nothing in the nature of money is included, but the process of exchange and the rudiments of the idea of articles having a more or less definite commercial value are there."

The foregoing can help us see how the roads established by the forebears of Ukumland, Nigeria and SSA as in other parts of the world serve the additional but no less important purpose of the dissemination of ideas and knowledge among nations and across continents.70 This can be viewed from Eric Wolf's (1982) critical response to the "myth-making scheme" (p.5) of those who strove to thwart and distort history by attempting to deny history to people who, from antiquity have been involved in the making of history. While we skip the far-reaching excursus of Wolf's scholarship in *Europe and the People Without History* (1982), we, however, need to pull in some of his insights to illustrate that, "the world of human kind is a manifold, a totality of interconnected processes" which inquiries have dismembered into parts that they could not reassemble and so end in the falsification of reality (p.3). By referencing varied connections—ecological, demographic, economic, political, and even epidemiological linkages—we argue with Wolf that there have been "contacts and connections, linkages and interrelations" (p.4) between and among peoples dating back to antiquity.

The main take-away point and its sustaining argument here is that these "interconnections" and "interrelations" would have been totally impossible had nations remained locked up in their remote isolations. On the contrary, the ancients' legacy of routes through which they kept in touch with neighboring tribes and wider populations in the trade of goods and services, and in the dissemination of ideas, served the course of these linkages even at historical moments when there hardly were telephones and the internet.

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70 In using the *geographical* term of "continent" we are not unaware of the deeply entrenched political underpinnings in the backdrop of its evolution and application in the partitioning of historically interconnected parts of the world, and more so the pejorative representations no less the criteria behind its usage in reference to Africa. In making this caveat, we think along with Martin W. Lewis and Karen E. Wigen (1997) whose critique of the politics of continental partitioning of the universe is laid out in their book *The Myth of Continents* (*A Critique of Metageography*) as did also Eric Wolf (1982).

Before furthering with this explorative insertion, it is important to put in perspective, that this study adopts the understanding of "trade route" as "an area or proscribed passage by land or sea used by merchants and caravans for economic purposes" (World Geography, 2010). Thus understood, a trade route can be established between any multiple points linked by trade, whatever the distance between them, and can exist within a small area like Ukum, or within a specific region like SSA, or over vast distances between a number of regions as in different parts of African.

While all ancient trade routes were involved in the exchange of multiple goods, the largest and most famous trade routes became known for the movement of specific precious goods such as gold, salt, and silk. It is not uncommon, therefore, that certain trade routes have assumed nomenclatural sobriquets after the names of the goods traded, hence the "Silk Road71," "Gold

71 The ***Silk Road*** or ***Silk Route*** was an ancient network of trade routes that were central to cultural interaction through regions of the Asian continent connecting the West and East China to the Mediterranean Sea. The Silk Road derives its name from the lucrative trade in Chinese silk carried out along its length, beginning during the Han dynasty (207 BCE-220 CE). Trade on the Silk Road was a significant factor in the development of the civilizations of China, the Indian subcontinent, Persia, Europe, the Horn of Africa and Arabia, opening long-distance, political and economic relations between the civilizations. Though silk was certainly the major trade item from China, many other goods were traded, and religions, syncretic philosophies, and various technologies, as well as diseases, also traveled along the Silk Routes. In addition to economic trade, the Silk Road served as a means of carrying out cultural trade among the civilizations along its network (UNESCO World Heritage Site, 2016).

Road"72 and "Salt Road."73 Most trade routes, on the other hand, dealt in the trafficking of human beings, though some did more so than others. Of greater importance for this current inquiry, however, is the fact that, no matter the goods moved along trade routes, they also played a crucially important role in the formation of ancient and medieval empires and civilizations around the globe. Similarly, they were sources of exchange in the "trade" of ideas, of peoples, and of the diffusion of cultures.

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72 About the **Gold Road**, history has that around the fifth century, thanks to the availability of the camel, Berber-speaking people began crossing the Sahara Desert. From the eighth century onward, annual trade caravans followed routes later described by Arabic authors with minute attention to detail. Gold, sought from the western and central Sudan, was the main commodity of the trans-Saharan trade. The traffic in gold was spurred by the demand for and supply of coinage. The rise of the Soninke Empire of Ghana appears to be related to the beginnings of the trans-Saharan gold trade in the fifth century. From the seventh to the eleventh century, trans-Saharan trade linked the Mediterranean economies that demanded gold—and could supply salt—to the sub-Saharan economies, where gold was abundant. Although local supply of salt was sufficient in sub-Saharan Africa, the consumption of Saharan salt was promoted for trade purposes. In the eighth and ninth centuries, Arab merchants operating in southern Moroccan towns such as Sijilmasa bought gold from the Berbers, and financed more caravans. These commercial transactions encouraged further conversion of the Berbers to Islam. Increased demand for gold in the North Islamic states, which sought the raw metal for minting, prompted scholarly attention to Mali and Ghana, the latter referred to as the "Land of Gold." For instance, geographer al-Bakri described the eleventh-century court at Kumbi Saleh, where he saw gold-embroidered caps, golden saddles, shields and swords mounted with gold, and dogs' collars adorned with gold and silver. The Soninke managed to keep the source of their gold (the Bambuk mines, most notably) secret from Muslim traders. Yet gold production and trade were important activities that undoubtedly mobilized hundreds of thousands of African people. Leaders of the ancient kingdom of Ghana accumulated wealth by keeping the core of pure metal, leaving the unworked native gold to be marketed by their people. By 1050 A.D., Ghana was strong enough to assume control of the Islamic Berber town of Audaghost. By the end of the twelfth century, however, Ghana had lost its domination of the western Sudan gold trade. Trans-Saharan routes began to bypass Audaghost, expanding instead toward the newly opened Bure goldfield. Soso, the southern chiefdom of the Soninke, gained control of Ghana as well as the Malinke, the latter eventually liberated by Sundiata Keita, who founded the

73 The **Old Salt Route** was a medieval trade route in northern Germany, one of the ancient network of salt roads which were used primarily for the transport of salt and other staples. In Germany it was referred to as Alte Salzstraße. Salt was very valuable at that time and, consequently, was sometimes known as "white gold." The vast majority of the salt transported on the road was produced from brine near Lüneburg, a city in the northern central part of the country and then transported to Lübeck, a major seaport on Germany's Baltic coast. Historians generally recognize the Old Salt Route as part of a much longer path, which functioned as an important connection between the northern and southern reaches of the country. One of the oldest documents that confirms Lüneburg and its role in refining and transporting salt dates back to 956 A.D. According to that document, King Otto I the Great granted the St. Michaelis Monastery the customs revenue from the saltworks. Even at those early times, the city's wealth was based in large part on the salt found in the area. However, the Old Salt Route attained its peak of success between the 12th and the 16th century.

As Fieldnotes (September 28, 2013) of this study strongly suggest; and as Bohannan (1953:35; 1968:5, 228); Downes (1933:35) and Rubingh (1969:43, 63) also point out, trade routes have remained from antiquity means of sharing and borrowing of cultural, religious, social and political facts between the Tiv and their neighbors especially the Junkun of Taraba State; these facts have also entered into, and influenced, the morphological and physiological dimensions of the social organization of Ukum. As Rubingh (1969:89) states, it was from the Jukun that "[…] the Tiv adopted various forms of social control,74 and several magical charms and talisman." Through trade relations via trade routes the Tiv also borrowed much from the *akombo75* and t*sav76* religious articles from the Jukun. As Ayangaor (2011:73-97) documents, trade routes plaid and still play major interconnecting social role between the Tiv and their Southern neighbors including but not limited to the Ibibio, the Efik, the Boki, the Bakor, the Yala all of which share borders with the Tiv along the Cross River basin on the one hand, and the Bette, the Bekwarra, the Bendi, the Becheve, and the Utange, on the other. Trade routes and pathways also facilitated European and Missionary penetration of Tivland. As Rubingh (1969:63) writes, "Colonization was vigorously resisted and no serious penetration was attempted until 1907 when the English moved into Tivland from Ibi and Wukari which lie northeast."

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74 One example here is the case of the drum chief (*tor agbande*), which originally was an office imported by Tiv elders from the Jukuns, to provide them with a figurehead pupper with which to awe the people and insure obedience. It is more or less an equivalent of the *Okonko* of Igboland in Southeast Nigeria, which was imported from some parts of Cross River State and serve as men's entry into and initiation rite that creates a kind of esotericism and Aristocracy among initiates and aimed at social mobility and dignified respectability to awe non-initiates and women above all.

75 *Akombo* are spiritual forces created by *Aondo* (Tiv word for God, the High God, or the Creator who has a personality and therefore can experience emotions such as anger) for the regulation of the cosmos and to prevent it from malfunction (Rubingh, 1969:71, 77; Bohannan, 1953:85).

76 *Tsav*, on the other hand, is a complex factor in Tiv traditional religion the approximated translation of which comes to mean "witchcraft potential" that could be used by malevolent people (Rubingh, 1969:73; Bohannan, 1953:84).

11.6.3 *Trade Routes Within and Beyond SSA: Continental and International Linkages*

Before the development of complex road networks running across and linking different parts of Africa, there were sand roads which created what has been technically described as "trans-Saharan trade" (Golden Valley High School (GVHS), 2015). The trans-Saharan trade route linked North Africa and the Mediterranean worlds with the land and peoples of interior West Africa (Major Trade Routes (MTR), 2015). This mix and the linkages therefrom also reflected in the kinds of goods running forth-and-back the terrain of these sand trade routes on the one hand, and the environmental variations on the other. From the North African Coast, cloth, glassware, weapons, books, and manufactured goods moved along these routes. From Sahara Desert, copper and salt, sweet and nutritious dates were obtained at the areas of oasis where the populations were mostly pastoral and nomadic. From Sub-Saharan Africa came a rich variety of agricultural goods, textiles and metal goods produced locally. Gold, savanna grain crops, roots and forest tree crops also came from this area.

Further characterizing the history of these regional trade routes is the fact that they did not run across the Sahara desert but were mostly confined among the agricultural peoples of the area known as the Sudan otherwise "the land of the black people" (GVHS, 2015). However, the contours of these trade routes expanded and assumed nautical dimensions and so began to include the use of boats. To facilitate penetration into the trans-Saharan region especially North Africa, camels were introduced which made trek across the desert possible. So that by 300-400 CE, camel-owning merchants who lived in the oasis initiated trans-Saharan commerce; and several centuries later, North African Arabs who were enroute with Islam, organized trans-Saharan caravans.

Following these developments along the trans-Saharan trade routes, the movement of gold followed suit. Gold was transported by donkeys from the borders between the grasslands and the

forests to caravan points along the southern edge of the desert where it is transferred to camels for the longer journey. African ivory, kola nuts and, of course, slaves, were also on high demand in the desert and the Mediterranean basin and moved along the trans-Saharan trade routes. In return, the peoples of the Sudan received horses, cloth, dates, manufactured goods, and importantly salt.

In this gradual progression of history—the history of the development of the trans-Saharan trade routes—came the development of a new international trade route and new political structures. In that direction the caravans that made the desert-crossing were reported to have been as numerous as 5,000 camels and hundreds of people who traveled for up to 70 or more days (15-20 miles per day), mostly at night and in large groups to assure protection (GVHS, 2015). Displacing the horse and donkeys on the desert trade tours, the camel was preferred because of its long legs and its ability to travel long distances without water (MTR, 2015). They linked the interior of West Africa with lands and peoples far to the North. These caravans traversed the desert for over 1,000 years. Between 500 and 1600 CE there had already been created a series of states in Western and Central Sudan including Ghana, Mali, Songhay, Kanem-Bornu, and Hausa city-states.

Ghana for one became an old, powerful, and prosperous kingdom and controlled the gold and salt trade; dominated by Islam (985 AD); conquered only by the Berbers and Tuaregs. In this light the kingdom of Ghana became the most important commercial site in West Africa being the center for trade in gold which it did not produce itself. The kings of Ghana obtained gold from lands to the south and so became wealthy by controlling and taxing the gold trade. Muslim merchants were especially eager to buy gold for their customers in the Mediterranean basin and the Islamic world. Making Ghana more prosperous was its provision of ivory and slaves for which it received horses, cloth, manufactured wares and salt in exchange. However, Mali seemed to have superseded Ghana having become heir to most of the territory and commercial enterprises of

Ghana. Mali benefited from the trans-Saharan trade even more than Ghana. As such, from the 13th until the late 15th Century, Mali controlled and taxed almost all the trade passing through West Africa. These city-states were all monarchies with elaborate political structures, court systems and some administration and military forces; they taxed merchants and goods, and were reputed for being great and affluent communities.

Not surprising, these newly born West African city-states and their corresponding political structures soon, through the intensified use of the trade routes, expanded into urban and commercial centers such as Koumbi-Saleh, Jenne, Timbuktu, Gao, Gobir, and Kano. Some of them became manufacturing centers, some cosmopolitan places where court officials, artisans, scholars, students, as well as local and foreign merchants convoked to rub elbows. In this way, Islam became an important player in the formation of urban culture (Fage, 1978). Commenting on the influence of trade routes on the spread of religion and the formation of new religious alliances, the historical document MTR (2015:51) observed thus:

> Contact with Muslim merchants encouraged sub-Saharan West Africans and coast East Africans to adopt Islam. It served as a cultural foundation for business relationships. Yet African ruling elites and merchants did not convert for purely mercenary reasons; they took their new faith s eriously

Approached from its trans-African and or intercontinental landscape, we see again the great role of trade routes in linking, for example, three major continents—Africa, Asia and Europe. In this way we see also how "trade routes connected most major civilizations [and] one of the biggest reasons cultural diffusion took place [and] helped ideas, technologies […] spread across the entire world" (MTR, 2015:1-2). This is a very important connection in the point the pursuit of which has sustained the discourse thus far. As a concrete example,

> There is evidence of early trade between ancient Mesopotamia and the Indus Valley. This trade appears to have broken off as Mesopotamia turned more toward trade with East Africa. Two thousand years ago, Malay sailors from Southeast Asia migrated to the islands of Madagascar.

> These migrants, however, did not retain communications or trade with their homeland (MTR, 2015)

What is left here now, using the Ukum-Nigerian case study as reference point, is to appraise and draw the conclusion that the LGAs, States, and the Nigerian and other national governments of SSA have failed to follow the exemplary and pioneering legacy and pattern of the ancients in pursing agricultural and general economic development amidst other sides of social intercourse through the installation of road/transportation network (and other related) infrastructure.

11.7 *Conclusion: Chapter Summations*

Based on the study findings for this chapter, the following points summarize conclusions for this chapter especially as they speak to the core concern of this case study:

1) Study findings underscore the supreme importance of infrastructure for economic general economic and particularly agricultural development in SSA as in other parts of the world.

2) This emphasis is made more so because infrastructure boosts investment incentives just as it logically conduces to and enhances community development

3) Poor or total lack of infrastructure for general and agricultural development in particular accounts for why SSA lags behind in meeting the MDGs targets, especially ensuring food security and poverty reduction.

4) Infrastructure as is used here refers to all basic facilities, services, and installations needed for sustainable functioning of a community such as transportation and communication systems, water and power lines, and public institutions including schools, post offices, and prisons.

5) While emphasis is placed on the need for all infrastructure (hard and soft; economic and social)—for overall economic growth in SSA—there is even greater emphasis on road/transport infrastructure because of its lead role in catalyzing and fostering other infrastructure types.

6) Unfortunately, all roads types—Trunks "C," "B," and "A"—found in Nigeria and other nations of SSA are in poor shape and so cannot support and sustain agricultural development.

7) This is not withstanding the fact that routes and road networks have been found throughout history to promote all kinds of social, economic and political intercourse across world regions.

8) As a result of poor infrastructure, especially good road networks, the cost of producing food has been on the rise for farmers who pay exorbitantly high prices for transportation.

9) The high cost of transportation farmers incur—which increases their overall production cost is significantly accounted for by the fact that commercial transporters themselves experience high cost in keeping and maintaining their automobiles on the same very bad roads.

10) Overall, therefore, these factors together yield the expected huge consequence of high prices of agricultural goods and also account for rural SSA farmers are poor.

11) The major shortages in the level of agricultural productivity caused by this constellation of bottlenecks caused by poor infrastructure partly explain why SSA nations spend so much on importation of staples they otherwise have comparative advantage in producing and exporting.

12) If anything it is that this accentuates the level of poverty SSA populations experience as their governments, by failing to install and maintain effective infrastructure, spend resources that could have been ploughed into development on importation of staple foods.

13) All this goes to underscore again one of the ideological underpinnings with which we started charting the course of this study, namely, that post-independence governments of SSA began with policy misplacements—and have continued to make wrong policy decisions in addition to corruption—that hurt and retard the progress of agricultural development and the development, above all, of the very rural communities where agriculture, in fact, occurs.

14) All these shortcomings in general and agricultural development in particular caused by lack of functioning infrastructure also suggest and open the doors for realistic policy repositioning as our recommendations stand to do in the last chapter of this work.

Chapter 12: Meeting the State in Nigerian Rural Markets: The Ukum Experience

12.1 *Chapter Overview*

Following the ideological framework guiding this case study sections three and four examined some aspects of agricultural production through which the inquiry tracked how farmers are impacted by certain factors on the hand, and how all that affects agricultural development in Ukum—Nigeria and, by extension to other parts of SSA. In the third section the study honed in on the factors of (agricultural) production—land, labor and capital. In section four, attention was turned to other related aspects of agricultural development in Ukum-Nigeria including farming tools, techniques and systems; conflicts; and infrastructure. In all these six chapters the sustaining aim of the investigation was to understand how the agriculture sector of the area is impacted by these factors. In all the chapters as well, the study found out some outstanding results that respond to the study questions and so shed light on why agricultural development in Ukum, in Nigeria, and in many other communities of SSA has fared so poorly.

One most important of all study findings is that the private sector-farmers themselves-have been working almost always alone without any (meaningful) assistance from the public sector. By pushing for answers to this crucial part of the inquiry the study could not miss the point that the government of Ukumland as with other parts of Nigeria and SSA have failed to provide farmers with requisite assistance—land tenure security; improved ways of labor and entrepreneurial management; capital and related farm inputs; improved farming systems and technologies; conflict-free environment and conflict management institutions that conduce to sustainable production; and adequate and effective infrastructure—all of which farmers need to boost agricultural productivity. These data-informed conclusions are very strongly corroborated by a

plethora of literature consulted to appraise the findings in order to build a case for appropriate intervention including policy recommendations.

As it were, it does seem the business of these two sections, especially the fourth, would remain incomplete if further and more critical attention is not accorded the fact of how the same public sector (the official government) exercises social and political control over farmers and traders in matters of agricultural produce. No other social space provides an appropriate forum for examining how the government of Ukumland exercises this power as the market institution. The economic anthropology of agricultural production in Ukumland pursued here under the ideological framework of political economy makes for reaffirming that the distribution and consumption of agricultural produce are an integral part of the whole production process. Farmers work at the farm and push their produce to the market where they meet traders (and sometimes final consumers). It is within this process of the distribution (and consumption) of agricultural goods that this chapter examines state control of famers and traders on the one hand, and how it does this, on the other.

In its full stretch the chapter examines the phenomenon of the market institution in Ukumland; how this social institution was born and expanded; how it was organized before the era of Ukum-British encounter in early 1900s; what became of the market institution and its operations after government take-over in the Ukum post-independence political experience; how the state exercises social and political control over farmers and traders; how this control impacts farmers and traders in their activities; what role the state government plays in the interest of farmers and traders; and above all, how this presence of the state at the market enhances and or hinders the prospects of agricultural development in the area. In developing these sub-chapters much reference would necessarily be made to the previous six chapters of sections three and four. In addition, a

lot of insight would be drawn from fieldnotes gathered in this study and, when applicable, appeal would be made to literature relevant to the question of the State and Markets in Nigeria and SSA.

12.2 *The Phenomenon of Markets in Ukumland-Nigeria*

Ukumland is as rich in markets as it is prodigally abundant in food production. This is a social phenomenon that is very readily observed across all Ukum and other parts of Tivland and the entirety of Benue State. It does not seem to be ethnographically out of place to assume a note of quasi conclusion that this is expected considering that for a place like Ukum—as with many other groups from across the world—where people are engaged in agricultural production it is also expected that they would have some social spaces where they exchange their produce for some other thing/s either in form of other goods as in barter trade or for money where farm produce has entered pure market economy. A tour around Ukumland brings one face-to-face with markets of varying magnitude. Similarly, there are dozens of markets in Ukum villages and communities, sometimes more than one within a particular village. It is not necessary to enumerate all the markets in Ukum in this work; only the big and more highly attended ones are represented here.

Table 12.1: *Main Markets in Ukum Local Government Area of Benue State, Nigeria*

Names of Markets	Days of Operation
Zaki-Biam	Saturday
Vaase	Saturday
Gbagir	Friday
Tine-Nune	Friday
Jande-Ikyula	Friday
Gbeji	Thursday
Ayati	Thursday
Chito	Wednesday
Ikyaior	Wednesday
Jootar (Mbaterem)	Wednesday
Sankera	Wednesday
Kaydo	Tuesday
Ater	Tuesday
Igbongom	Tuesday

Afia	Monday
Diom	Monday

12.2.1 *Ukum Large Markets*

As is displayed in the table (12.1) above, each of these Ukum major markets operates on a particular customarily assigned weekday. Sometimes more than one of them functions on the same day; as such it is common for farmers and traders to shuttle between two markets in one day chasing either more and better goods or better prices. In all these big markets many agricultural goods are sold and bought including yams, rice, guinea corn, cassava (raw ad dry), fresh tomatoes, sweet potatoes, maize among others. Citrus fruits of all kinds are also traded in these markets. Sold in these markets also include manufactured goods of all types; agricultural production facilities such as fertilizers, insecticides, herbicides, and fungicides also feature. Drinking and eating joints are part of the market system in Ukumland and are easily accessible to market attendees. Indigenous blacksmiths and their furnaces make part of the life of Ukum markets; they fabricate farm tools, which farmers depend on including small and big hoes, cutlasses, axes, diggers, sickles, wheel barrows, and a host of other implements that attract ready consumers. Sometimes, however, "[…] they buy hoe blades from Ibo blacksmiths" (Bohannan, 1965:116).

While some Igbo and Hausa-Fulani traders come down sometimes a day or two before the day the markets operate, some of them are permanent migrant settlers around the communities. As the Igbo come they bring along with them palm oil which they sell to Ukum people whose soil conditions do not favor the thriving of oil palm trees. The Hausa-Fulani, on the other hand bring especially fabrics (from Chad), dry fish and cattle. As Bohannan (1965:53) documents,

> These large markets are hubs in the system of exchange, and both drain and supply large areas through the medium of the overlapping market circles which surround them. It is at these large markets that most of the food exported, in considerable amounts, from Tivland is bought by Tiv,

> Hausa, or Ibo exporters. This food is brought in both by the original producers and by middle-men who have bought cheaply in the small surrounding markets and sell at a higher price in large markets.

Zaki-Biam is the largest of these large markets and attracts more people from all parts of Nigeria.

12.2.2 *Ukum Small Markets*

In addition to the large markets found in Ukum—usually at the intersection between the major tarred roads which run across Ukum to Northern Nigeria and feeder-roads leading into the hinterland communities and villages—there are other tens of dozen small markets. These small markets are found in hamlets or villages and sometimes more than one in a village; they are almost always under very huge trees that provide shade to buyers and sellers. While these also fulfill the purpose of market as in the case of the large ones, a major difference with them is that agricultural produce do not usually come into them in large quantities. They rather serve more the needs of the indigenes themselves where they meet to eat and drink; to relax on dry lugs of wood and tell stories usually revolving around sexual banter and innuendos; to discuss local and national politics and the state of the economy; to meet members of one's age set; to make new friends; to form and join new clubs and farm-related associations; to seek and chase after women; to convoke the entire village for crucial matters; to discuss farming seasons or weather conditions; and to settle disputes.

In addition to serving the daily exchange needs of Ukum indigenes themselves, these small markets also provide a nexus where outsider traders come to buy farm produce usually for retail at other parts of Nigeria. They do this because meeting local farmers at the small village markets offers traders the benefit of purchasing at cheaper prices in order to maximize profit in the urban cities. However, Ukum people have learnt how to circumvent this market behavior; most of them prefer to move their goods to the large markets where they know prices are usually higher. As one young Mbaterem-Ukum male farmer's economic reasoning goes,

> The Igbo people say they come here to buy our goods as a way of helping us save money we would have spent on transportation to the big markets. But we know they are lying to us because they do it just to get our goods cheap and go back to make big money. We no longer believe their story; we now prefer to pay transport money and sell at better prices. (Fieldnotes: September 29, 2013).

12.3 *Origin and Expansion of Markets in Ukum: The Case of Zaki-Biam*

As the story of My Ube goes, a market in Ukum village is born when a man, a family or compound donates land to be cleared and used for the purpose of this kind of gathering. They do this as a way of achieving three things: 1) to secure prestige for themselves; 2) to immortalize their names in the community and beyond; and 3) to seek and honor. This seems to be supported by the fact that these markets go by the names of the persons, families or compounds who donated the land upon which they are established. Over and above this, the primary aim of these small village markets is to create a social space where communities primarily gather to exercise the transactions of exchange in all its forms in addition to serving the added social functions as are listed above.

Tortange Dugwer Biam's story (Fieldnotes: August, 21, 2012) seems to validate the foregoing narrative on the origin (and purpose) of markets in Ukumland. Using the case of the Zaki-Biam main market, he presses the point that the reason it goes by the name "Zaki-Biam" is that the land upon which the market was built was donated by his grandfather, Biam, the founder of the Biam kindred. Mr. Biam tells the story of Zaki-Biam market.

> When our grandfather, Biam, came to this place long ago, he settled at the place where there is the current Aluga filling station. There he lived and died and his grave is still there till date. When Biam died, one of his sons, Ngough, indeed the oldest, relocated to the place where Chief Stephen Ahamba Biam is residing now—along Ugba road as you go towards the Zaki-Biam market. This happened at the same time when the missionaries arrived this part of Tiv-land. When the missionaries came they requested for a place to settle down and were granted the portion of land where NKST77 church Zaki-Biam is situated along Wukari road. It was also the NKST

77 NKST is the abbreviation for a Church group that stands for *Nungo Kristu u I Sir u sha Tur* which is translated into English as "Universal Reformed Christian Church" based in Nigeria. It has its headquarters in Benue State and has gradually spread all over the country. However, NKST members are predominantly of the Tiv-speaking tribe. NKST was first introduced in Sai in 1911, a village in Katsina-Ala Local Government Area (LGA) of Benue State, Nigeria though its headquarters is now at Mkar in Gboko being

> missionaries who convinced Ngough, the oldest son of Biam, that there is need for a market place. One of the main objectives of the missionaries was to provide an open social space where their workers could go and find food. Prior to this there were already some few centers for selling cooked food but the request of the missionaries was to get it expanded (Fieldnotes, August 21, 2013).

When the women who operated the cooked food centers became tired and could no longer meet the daily growing demands of the increasing number of those who came to eat at their centers, they began to bring in raw foodstuffs so that people could buy and go home to cook for themselves. Some of the raw foodstuffs included beans, millet, guinea corn, yam, rice among others. At this point people from other parts of Nigeria, including the Hausa-Fulani from the North and the Igbo and Ibibio from the Southeast, became aware of this emerging raw food market and also began to come to buy. With this development, and as people continued to grow in awareness of this new thing, the Zaki-Biam market continued to grow. However, it was the yam section of the market that came first before later on the general section for all food stuffs was developed.

As at this time, Ukum was under Katsina-Ala. When the government of Katsina-Ala saw that the market activities had grown and that the number of people continued to swell the request was made to move it to a bigger place; thus the market was shifted to its present more spacious location. Prior to Zaki-Biam there were other spaces called market at places like *Gboko* and *Ihugh*.

12.4 *Administrative and Organizational Structure of Zaki-Biam Market*

As tradition had it, the oldest of the sons of Biam emerged the main stakeholder and overseer of the organization of the Zaki-Biam market affairs. He discharged this customary duty in collaboration with two other elders from the Biam family. These traditional Biam market

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the traditional headquarters of the Tiv in Benue State. NKST Church began as the fruit of the missionary work of the Dutch Reformed Church in South Africa. It was extended to Nigeria in 1911 among Tiv people in Gongola and Benue States. In 1960, due to the apartheid system, the South African missionaries were no longer tolerated in Nigeria and had to leave. It was formally organized in 1957 as an autonomous, self-supporting, self-propagating Church with four Nigerian Pastors.

overseers and caretakers exercised the customary responsibility of maintaining order by instituting and keeping the following disciplinary principles to see that there was: 1) no cheating in the market; 2) no stealing in the market; 3) that there was order and discipline in the market; that disputes were settled fairly and defaulters justly fined; 4) that if anybody was caught stealing in the market, he/she was brought forward to the Biam market elders who made sure he/she restored the stolen item; 5) that, if the thief was found to have taken the stolen item/s home or away from the market area, he/she was only reprimanded and set free; 6) that if any individual was found guilty of cheating in the market, he/she was sternly warned in order to deter him/her from repeating the act in future; 7) that, in the event anybody was found truant regarding any particularly socially and morally objectionable act in the market area—stealing, fighting, cheating, drunkenness—and was brought to the market overseers for the customary procedure, the person, if found guilty of the same thing the first and second times, was pardoned; 8) and that when the same individual was caught on the same charges a third time, he/she was handed over to the civil government for action. However, the reason the culprit was referred to the government remains unclear to Mr. Biam.

The traditional Zaki-Biam market overseers did not charge anything from anybody except that they were accorded some benefits by marketers in the form of small quantities of the foodstuffs they brought to the market. They in turn shared the food stuffs with their brothers from their Biam kindred. Never did they impose any money levy on any buyer or seller of stuffs at the Zaki-Biam market. In addition to maintaining order they also handled and settled market disputes. They handled affairs of the market in such a way that they were beyond reproach. Furthermore, on the days the Zaki-Biam market operated they did not allow nobody to start any activities until about 10:00am; this was to ensure that people from far and near places, as much as was possible, had

come in for the day's transactions. The market activities usually began with the authorizing announcement of the Biam elders.

However, the organization and management of Zaki-Biam market affairs changed hands from Biam customary elders to the Chairman of Ukum Local Government Area when Ukum gained autonomy from Katsina-Ala LGA. As a result of this transition, all orders on market regulation now comes from the Chairman of Ukum LGA who administered the market through his officially appointed agents who execute his orders on his behalf. Regrettably, this forceful take-over of the market administration has turned everything upside-down, of course because of money and other benefits involved. Presently, farmers and traders are levied by the LGA Chairman; they also pay many revenues for conducting business activities in the market; the agents of the LG Chairman also collect their own levy on people. All these are not withstanding the fact, Mr. Biam concludes, that the same Chairman of Ukum LGA and his agents who have monetized the organization and administration of the Zaki-Biam market do not install or maintain infrastructure there. Mr. Biam's oldest son who was part of the encounter threw in some points here. Contrasting the past and present administrative structure of the Zaki-Biam market he stated:

> In the past when the market was in the hands of the Biam elders, traders and farmers were not charged any money for using the market to do their business. But now all traders from all parts of Nigeria complain that they are charged many revenues on the roads back to their towns, and they are not happy about it because it makes them spend too much money on the road. That is corruption, and it is bad (Fieldnotes: August 23, 2012).

Emphasizing the importance of Zaki-Biam market not only in Benue State but also in Nigeria while at the same time decrying the fact of how it is not contributing to rural and community development in Ukum, Mr. Biam comments:

> The importance of Zaki-Biam market lies in the fact that the so much food produced in Ukum is sold in it everyday. It is the biggest market in our land. People from all parts of Nigeria come here to buy from our market; some of them have already settled in our community. This makes Zaki-Biam a very important place in Nigeria. Zaki-Biam has helped to build peace and harmony between Ukum people and strangers from other parts of the country. This peaceful condition is

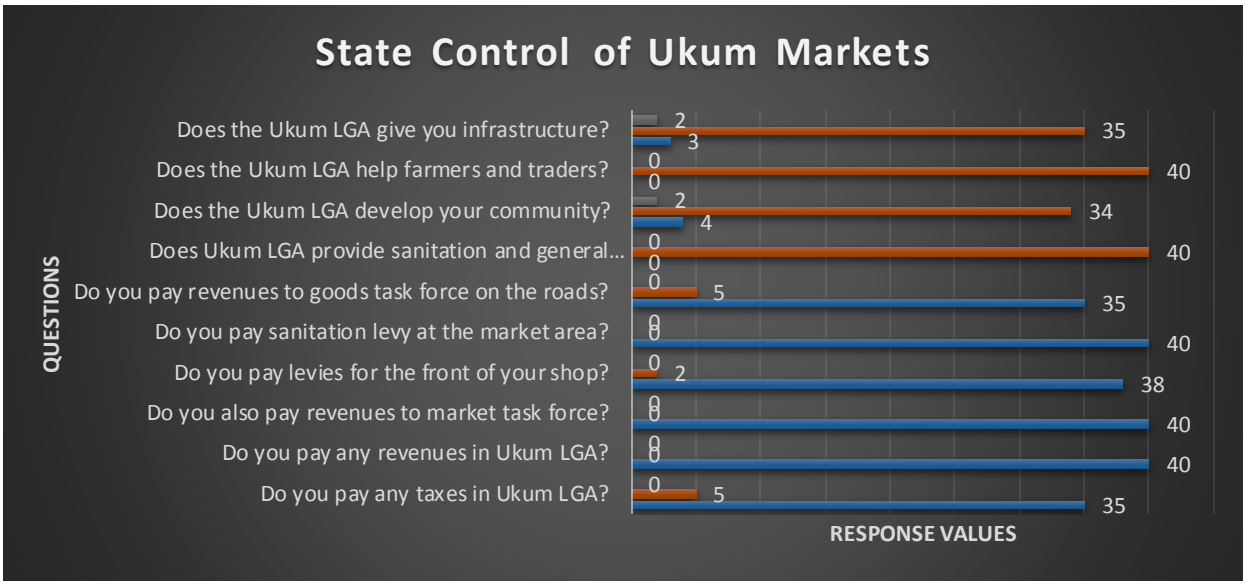
traceable to the injunction left us as a legacy by our grandfather, Biam himself

12.5 *State Take-Over and Control of Farmers and Traders at the Zaki-Biam Market*

Building on the concluding part of Mr. Biam's story charged with critique of how the civil government of Ukumland has monetized the administration of Zaki-Biam market without doing corresponding installation and maintenance of infrastructure within the place on the one hand, and bringing forward the main findings of the six chapters preceding the present chapter, on the other, there arose the need to push the inquiry of this study even further. In addition to what direct observation reveals some survey instruments were floated among farmers and traders through which answers were sought. 20 farmers and 20 traders were selected to respond to the survey questions and interviews crafted for this purpose. The table (12.2) has the data thus gathered.

Table 12.3*: Meeting the State in Ukum LGA Markets*

Meeting the State in the Market in Ukumland (40 Respondents)			
Questions	Responses		
	Yes	No	Declined
Do you pay any taxes in Ukum LGA?	35	5	0
Do you pay any revenues in Ukum LGA?	40	0	0
Do you also pay revenues to market task force?	40	0	0
Do you pay levies for the front of your shop?	38	2	0
Do you pay sanitation levy at the market area?	40	0	0
Do you pay revenues to goods task force on the roads?	35	5	0
Does Ukum LGA provide sanitation and general maintenance?	0	40	0
Does the Ukum LGA develop your community?	4	34	2
Does the Ukum LGA help farmers and traders?	0	40	0
Does the Ukum LGA give you infrastructure?	3	35	2



12.5.1 *Survey Data Analysis: State Control of Farmers and Traders in Ukumland*

Following a simple step-by-step survey data analysis the study found that the vast majority (35/40) of Ukum-based farmers and traders pay taxes to the State of Benue and Ukum LGA. All 40 respondents stated they pay many revenues to the Ukum government as ordered by the LGA Chairman. Similarly, all 40 participants pay other kinds of revenue to Ukum market task force officers who act under the authority of the LGA Chairman. All 40 also pay for sanitation and general market maintenance levies; just as 30 out of the 40 farmers and traders stated they are charged levy for the front of their shops especially if they made any canopy-like projection in front of their shops intended to keep rain waters and rays of the sun away from themselves and their goods. 35 out of 40 farmers and especially traders from other parts of Nigeria pay uncountable revenues as many times as they encounter a group called "Goods Task Force" on their way back to their destinations for the retail of agricultural goods they purchase at Ukum markets. This phenomenon happens even after they leave Ukumland and move into other parts of Benue States; they are also stopped on the roads of other States till they reach home.

Flipping the other side of this investigation aimed at seeing what role the government plays towards farmers, the market spaces, infrastructure, rural and community development among others, the results are displayed in the table (12.2) and are most shocking as they are disappointing. All 40 participants stated that Ukum government does not provide sanitation and general maintenance or services within the markets. In the same way, all 40 respondents—farmers and traders—declared receiving no assistance such as credit facilities from the same government that charges them many levies and revenues. Only 4 respondents agreed seeing any rural and community development from the government; 35 of them indicated the government installs no infrastructure in the place. This inquiry continued in interviews aiming to gather information on the role of the State on this.

12.5.2 *Interview Data Analysis: State Control of Farmers and Traders in Ukumland*

Further attention was turned to farmers and traders in follow-up interviews aimed at fleshing out the skeleton from survey responses. It was a tug of war to convince farmers and traders to freely participate in this part of the research: fear of being reported to "those in charge" and possibly be arrested and tortured was always the inhibitive factor. However, those who declined involvement in the survey but finally agreed to be involved in the interview requested very emphatically never to be recorded or quoted as having said anything. On the other hand, even after introducing self and the purpose of the study to the "market officials" they too were not open to engaging researcher on the subject of the role of the State in relation to farmers, traders, the market system and rural and community development. The much they could submit was, "We are working for the government; we do only what we are instructed to do" (Fieldnotes: September 14, 2013). After this they were not open to discussing whether they render account to the government of the LGA for all the levies and revenues they collect in its name. This is against the fact of the

submission of many other off-record informants who disclosed that these market officials hide under the umbrella of working for the LGA to extort farmers and traders and even pointed out that they print their own receipts as cover up and claim all the levies and revenues are official.

Many traders (and farmers) indicated as many as six revenues they pay to either the government, market officials/task force or even to some other indigenous youth groups who use force to collect routine levies from shop owners. When such task force officials and youth groups are resisted, they loot traders' goods and personal effects and even beat them up. Worse still, farmers, and more so traders, expressed that they could not form unions aimed at advocating against these social evils. Their reason is fear of repression from the market task force agents who, purporting to represent the government disband such unions with raw violence. Past experiences of such measures were cited. The subdued tones of these submissions also bespeak the air of fear.

12.5.3 *Insights from Direct Observation: State Control of Farmers and Traders in Ukum*

Backgrounded in the findings registered in chapters 6 through to 11 inclusive on the one hand, and more solidly equipped (or biased?) by the story of Mr. Biam and others on issues about the Zaki-Biam market, on the other, the exercise of direct observation was more sharpened here than ever. Going round beyond Zaki-Biam market and observing closely around other markets such as Tine-Nune, Sankera and above all Kaydo conformed the responses from farmers and traders. Observing and interacting randomly with people in all these markets confirmed that the government of Ukum actually collects many levies and revenues in addition to taxes from farmers and traders. They also pay especially sanitation levies and other relatively substantial amounts of money as annual levy/revenues for operating their shops in these markets. Young men who create jobs for themselves by using two-wheeled hand-mobilized trucks to move goods for sellers and buyers are also compelled to pay levies each day they did any works in the markets without which

they would not be allowed to work. In like manner truck and taxi drivers pay their own share for tickets to permit them function in the markets each day they pull into the parks. Major and minor truck drivers moving goods for people along the main roads linking major parts of the LGA or and other parts of the State are stopped at many "Goods Check Points" for the collection of "revenue." The men who operate these check points carry wooden planks with sharp edge of nails at the ends; they place these on the roads to deflate the tires of the trucks should the driver refuse to stop.

The other side of the equation creates horrible contrasts: the markets are dirty, filled with garbage, waterlogged in the rains, and very bare and dusty in dry season. Around and within the markets standing water constitutes ready and fertile breeding grounds for mosquitoes. There are no public toilets of any kind in the markets; neither is there portable water provision in the markets or anywhere near. In the same vein medical service provision are totally absent from the markets.

12.5.4 *Synthesis of Findings from the Three Areas on State Control Markets in Ukumland*

If any obvious question arises from the foregoing three parts of this sub-chapter it must be: Where does all the money—levies and revenues—forcefully harvested from traders and farmers go? There seems to be no other acceptable answer in context that can respond adequately and fully to the above question but that the money goes into the pockets of the LGA Chairman and his/her henchmen; this was the firm and undiluted claim of almost all study respondents. This taps into the fact of Nigeria's deepest sickness—corruption. Corruption and embezzlement of public funds are the only things that *work* in Nigeria. But if corruption works it is only because it is the easiest and fastest channel through which public officers enrich themselves to the detriment of Nigerian citizens and to the total neglect of rural and community development even after collecting monies from the same public they abandon in poverty. Unfortunately, all the task force militia of the LGA

Chairman who are militarized and zombified into these works also join the line-up of those who live off of farmers' and traders' hard work.

Should at least half of the funds wrecked up from farmers and traders on daily basis be ploughed into the installation of infrastructure at the markets and in Ukumland as a whole, then, agricultural production would have translated into rural and community development—as it should be. This progress-choking situation is what has continually haunted the shadows of agricultural development since Nigeria's independence. The Ukum experience with farmers and traders in the face of State control of rural markets spreads like an intractable virus throughout the country. It is also the experience of other farming communities across SSA as rich evidence of extant literature shows. These current shady episodes of corruption which inhibits agricultural development in Nigeria as in other countries of SSA got the foundation laid by the immediate post-independence political leaders of SSA for whom struggle for power and personal enrichment was the ultimate point. For this too agricultural development was never made a priority all political rhetoric notwithstanding. It was for this reason that this study echoed in notes from Ake (1996) who did not mince words in stating that for the governments of SSA, the problem was not that agricultural development failed but that it never got started in the first place. The case of Ukum and the corruption that stands in the way of farmer's and traders' wellbeing on the one hand, and rural and community development on the other is a litmus proof that agricultural development has not just failed in Nigeria but that it has not yet started.

12.6 *State Construction of Core-Periphery Binary Opposites in Benue State*

The goings on in the agriculture sector of Ukumland and of Nigeria in general unavoidably open up to another fundamental question which revolves around the creation of core-periphery binary landscape in Ukumland in relation to other parts of Benue like Makurdi, the State Capital.

In making this inclusion two vignettes have been crafted to help portray the contrast that is being addressed here. The aim of this sub-chapter is to demonstrate that the neglect to which agricultural development is subjected in Ukumland—a typification of hundred other Nigerian agrarian communities—is rooted in the systemic neglect of the place though farmers and traders therein generate lots of income to the government. The first vignette centers on the citing of Universities and Agricultural Research Institute around the State Capital which is not the very place the mass production of food is happening. The second vignette focuses on how such establishments are lacking in Ukumland. The contrast will be self-evident.

Vignette 1: *The Case of Universities and Research Institute in the City*

Right at a strategic, conspicuous location of entry into the Capital City of Makurdi is seen the symbol of Benue State's pride as is portrayed in the figure (Plate 12.1) below.

Plate 12A: *Symbol of Benue State Pride—"Food Basket of the Nation*

The core of the contention being raised here is that there is deep undercurrent systemic exclusion of some parts of the State in the flagging of this symbol of State pride. The whole of Benue State identifies itself with the nationally recognized and respected symbol of being the

"Food basket of the nation." To a large extent this may not be contested regardless of the fact that it somehow strikes an overstatement considering the fact that there is more to food supply in Nigeria than this singular State produces. However, appraised on the strength of the prodigal quantities of food it produces, there is some merit to such a lofty claim.

However, the above prolegomena is not the preoccupation of the critical response intended here. The focus of this part is that greater part of the food generated in Benue State comes from Ukumland though the place is neglected from many perspectives as this study found. Whereas it is acceptable that this symbol of State pride could be located anywhere in the State, the rejoinder is that it is located at a place that is in the first place that is a three-hour drive from Ukum. While that symbol states a fact about the State, the place that produces greater percentage of the "food basket" is left out at the periphery of life.

Another set of social facts that boost the point being made here is that around the State Capital there are two universities and a national research institute of agriculture in addition to some other institutions of higher learning. There is the Benue State University and there is also Federal University of Agriculture all in Makurdi, the State Capital. There is also in Makurdi the Nigeria Army School of Military Engineering; a Federal Polytechnic Makurdi; and some Colleges of Education in and around Makurdi to add to the list. The only institution of higher education in the State fairly close to Ukum LGA (45 minutes' drive) is the College of Education, Katsina-Ala along Katsina-Ala/Wukari road.

Vignette 2: *The Case of Depriving Ukumland of Similar Institutions.*

To make the case clearer is the fact that there is no State or Federal institution of higher education in Ukumland; in like manner, Ukum has no State establishment within its territory. With Ukum's neck-deep involvement in agriculture, it would make a difference if at least some relevant

outlets of the University of Agriculture and or Research Institute of Agriculture at Makurdi were located around and within Ukumland proper. This would have made for a more agricultural production oriented collaboration between indigenous farmers and the State/Federal institutions. At least farmers and traders would have had the opportunity of some improved agro production techniques and programs to help boost productivity in the area and the State at large. This would have made farmers to be helped by agricultural extension agents from those institutions.

As it is presently, Ukumland is constructed into a periphery section of the State only good for this economic activity alone in addition, above all, to remain the reservoir of cheap labor and ready source of revenues, levies and taxes the benefits of which the people of Ukum remain strangers to. There are other parts of the State deeply involved in agricultural production that are also treated the same way as Ukum; their case also buttress and validate the point of this critique.

Vignette 3: *Abandoned Agricultural Processing Plant in Ukumland*.

In the recent times—some three to four years before this study commenced in 2012—a joint effort of the Federal and State governments started a huge and ambitious agro processing plant project close to Sankera, the Headquarters of Ukum LGA. A few clips will help.

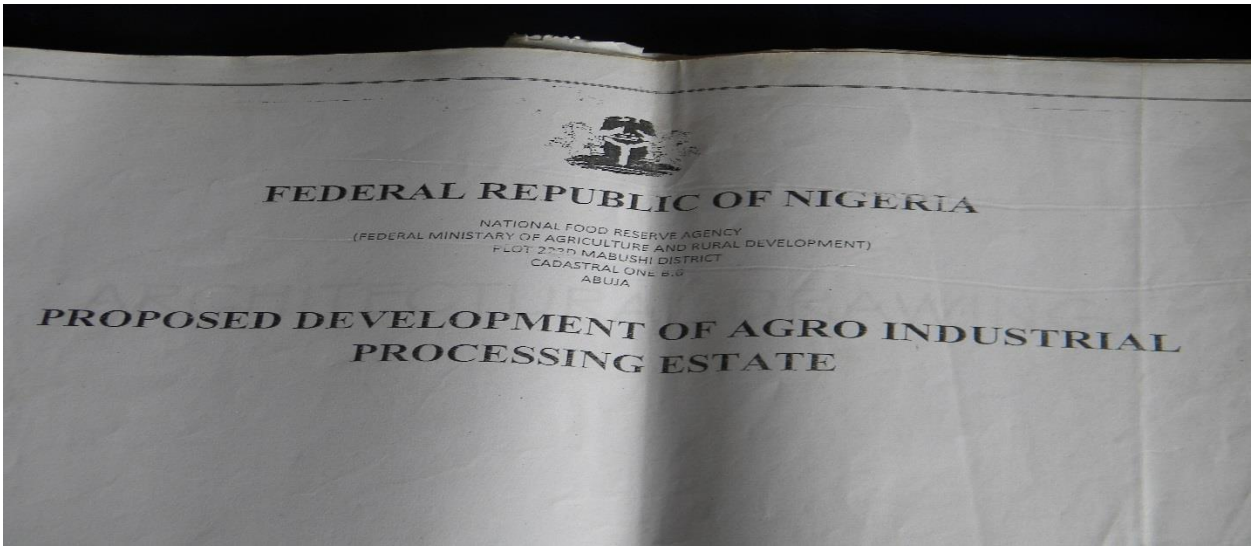


Plate 12B: Agricultural Processing Estate Cited in Ukum LGA, Benue State-Nigeria (8/22/12)

Plate 12C: A Building under Construction (8/22/12). Plate 12D: Buildings under Construction (8/22/12)

The mere announcement of this project brought huge relief to farmers of Ukum. For one thing, the hope was that it was going to stand up to, and reduce, lots of storage-related waste farmers experience because they still depend on crude and unimproved storage techniques in the face of inclement tropical weather. After close to a decade the project was conceived and started, it gradually but steadily fell into a moribund condition and finally died out; currently it has been added to the long indices of abandoned agricultural projects in Nigeria and hopes are dashed.

12.7 *Conclusion: Chapter Summations*

From the foregoing some conclusions are unmistakable—on how State control of rural markets in Nigeria impact agricultural and more so rural and community development.

1) Markets have been part of Ukum-Nigerian rural farming communities; in fact, they co-evolved.

2) When the administration especially of the big markets was in the hands of the indigenes themselves farmers and traders were not charged any levies though the market overseers saw to the wellbeing of market attendees and the market spaces themselves.

3) All these social benefits became monetized from when civil government took over the markets.

4) While it is the case that traders and farmers now pay many undefined levies and revenues they, the markets and their communities are abandoned without the installation of any infrastructure.

5) Corruption and personal gain on the part of political leaders and their agents account for the violent revenue collection and the crass neglect the people and their communities are subjected to.

6) For the same reasons agricultural production does not translate into rural community development among Ukum and Nigerian agrarian communities.

7) For reasons of fear, farmers and traders do not feel free to organize themselves against the evils.

8) While Ukum-Nigerian farmers and traders generate lots of money "for the government", their communities are left without any institutions of higher learning and agricultural research centers.

9) In these ways it is easy to see how State neglect of farming communities creates and reinforces unhelpful precedents of core-periphery divide in the same State and in the same country.

10) Over all, therefore, famers remain poor just as agricultural development lags behind in Nigeria.

SECTION FIVE: APPROPRIATE AGRICULTURAL DEVELOPMENT IN NIGERIA

Section General Introduction

The research undertaken here and which have been the subject of this long discussion has come to that point when, all things being equal, we could say is the point of conclusion. As it stands, however, we cannot make a good conclusion without taking two more necessary and logically connected steps in the form of the first two chapters of this section before the third and the last. For, whereas it is the case that the whole of section 5 focuses on a match towards appropriate agricultural development in Nigeria, chapters 13 and 14 have however closely interfacing words to say, hence their inclusion in this work and section in the first place.

Chapter 13 casts a backward-looking glance on the past of Nigeria's strides towards agricultural development, x-rays the programs and policies the nation instituted in that direction, and finally tries to find out if those programs delivered their lofty promises. The chapter looks into the historical backdrop preceding the path of agricultural development Nigeria took; as a follow up it makes some extended evaluation of that choice and all that happened within it. This aim, however, is to find out if the programs Nigeria floated which went by the name of agricultural development worked and, if they did not why they failed in order to avoid repeating them.

Chapter 14 takes a special interest and discusses the role of crude oil in Nigeria's economy and how the discovery and exploration of oil impact agricultural development in the country. Since it was a matter of policy twists that silenced the agriculture sector at the dawn of crude oil in Nigeria, the chapter wrestles with the question of what happened to agriculture.

Chapter 15, being the last, represents the contribution of this whole case study; it details what the present researcher is convinced as the right path to follow in order to get to effective and sustainable agricultural development in Nigeria and in Sub-Saharan Africa in general.

Chapter 13: Nigeria on the Path To Agricultural Development: Why It Is Not Working

13.1 *Chapter Overview*

Standing on the shoulders of, and leaning on the findings of the previous 12 chapters of this work, this chapter sets out to appraise what Nigeria did in the name of agricultural development from its independence in 1960. Using the Ukum case study the chapter raises some curious questions: 1) What did Nigeria do in the name of agricultural development after its independence in 1960? 2) Was the purpose of agricultural development realized in the programs Nigeria introduced since independence? 3) If what Nigeria embraced as agricultural development in its post-independence history fell short of the set target, what accounts for it? 4) How could the agriculture sector be refocused considering the current situation of the nation's economy?

To realize its aim the chapter takes a closer look at agricultural programs and initiatives undertaken by the Nigerian government in order, in the spirit of the overarching anchorage of this case study, to seek what could be done to put the country's agriculture sector on a better footing. As it were, composing the corpus of this chapter never required fresh research; the materials in it are informed by the findings of the previous chapters which are further appraised herein in light of the present-day economy of Nigeria on the one hand, and paying a much closer attention to what related literature say on the issue, on the other. It is in this ideological disposition that this chapter proceeds with its set goal. On the whole, therefore, the chapter opens up to, and gropes for answers to the fourth and last question guiding this study: What could, and must, be done to stand up to the assaults of poverty and food insecurity in Nigeria considering the place of agriculture in its economy? (Section 1, chapter 2).

13.2 *Nigeria's Earlier Attempts at Agricultural Development*

Since its independence in 1960 Nigeria has embraced and experimented on numerous national agricultural programs aimed at the creation of jobs as well as effecting economic and national development among other objectives (Agber et al, 2013:238). The agricultural development initiatives and programs Nigeria has introduced since 1960 are so many that sometimes one could lose count. However, for the purpose of this study, a quick periodization of some of them is essential in order to see, as much as is possible, how the sector has performed.

The first agricultural policy initiative in Nigeria spanned between1962-1968. At the birth of this first national development plan, "[…] agriculture contributed 61,2% of GDP and was the chief foreign exchange earner for the nation" (Okojie, 1991:34). This initializing step was characterized by lack of any specific plans reflecting the African situation as it is. Instead, driven by its preoccupation with industrialization, the nation treated agriculture with neglect (Ake, 1996; Okojie, 1991). As such the Nigerian government modeled its post-independence agricultural policies and programs on the extractive colonial economic policies, which emphasized mono-cropping for cash export produce to the neglect of food crops for domestic consumption. As has been noted, "Most African economies at independence were centered on the production and export of a single commodity, be it agricultural or mineral" ("Globalization and Post-Colonial Economies," 2014). Some of the cash crops this policy favored include cocoa, rubber, palm produce, and groundnuts. Accordingly, different regions of Nigeria were found ready and conducing geographical and ecological niches for the mass cultivation of these cash crops: groundnut in the North; cocoa in the West, and palm oil and palm kernel in the Southeast (Forde and Scott, 1946; Oluwasanmi, 1966). It is noteworthy, however, that the production of these cash crops, which boosted the economy of the country, was due to the hard work of hundreds of thousands of rural smallholder peasant producers (Oluwasanmi, 1966:2). The bias against food

crop, smallholder agriculture, as alluded to above, was rooted in policies that accorded insignificant consideration to agriculture in the allocation of investment funds.

The neglect of the agriculture sector just pointed out above bore many corresponding effects summed in its failure to fulfill its basic duties including provision of employment opportunities, sufficiency in food production, higher per capita real income, foreign exchange earnings and the generation of industrial raw materials (Okojie, 1991; Federal Ministry of National Planning, 1975). As would be expected, it also brought about sharp rise in prices of food stuffs, growing importation of food, fall in the production of traditional agriculture-related exports, and an expected increase in rural-urban migration. Remarkably, the importation of food and beverages rose from N61,6 million in 1970 to N2,1 billion by 1981 (Adeyemo, 1984).

The second era of National Development Plan (1970-74) did not hold out any better vision for agricultural development in Nigeria; instead, preoccupation with post-war reconstructions took greater share of monetary allocations. Again, agriculture was left out of the picture; so that, rhetoric aside, little was done regarding the desired improved agricultural production and food security.

Not even in the third moment of this plan (1975-80) did agricultural investment witness any positive difference. Even in a period like this when financial allocation was biased in favor of the productive sector to which agriculture belongs, policymakers apportioned more funds to large-scale projects, especially irrigation, allocating only 5 percent of total expenditure to agriculture. At this time the growth rate of food demand was estimated to be 3,5% per annum whereas that of food production was only at a point as low as 1% per annum. Instead of some rapid response to the looming food crisis of the time, Nigeria entered into yet other levels of heavy, capital-intensive, large-scale investments such as the River Basin Development Authorities (RBDA) conceived as the vehicle of Nigeria's integrated water resource management. The RBDA was projected to

contribute "[…] optimally to the socioeconomic activities of the nation by comprehensively planning, facilitating and creating the enabling environment for integrated conservation, development and management of various water-uses for the preservation of the quality and quantity of freshwater ecosystems" (Akanmu et al, 2004:106).

The RBDAs were established to provide water for irrigation and domestic water supply, improvement of navigation, hydro-electric power generation, and recreation facilities and fisheries projects. The river basins were also planned to engender big plantation farming and encourage the establishment of industrial complexes that could bring the private and public sectors into joint business partnership. According to Newswatch (August 27, 2009) specialist writer, the river basins are development modules aimed at bridging the widening gap between rural and urban areas and stem the drift of rural populations to already overcrowded cities. A key objective of the RBDAs was to help reduce the nation's dependence on rain-fed agriculture.

There were established in Nigeria 12 RBDAs spreading over the different geopolitical regions of the country (Akanmu et al, 2004:108. They include:

1) Anambra-Imo River Basin Development Authority;
2) Benin-Owena River Basin Development Authority;
3) Chad River Basin Development Authority;
4) Cross River River Basin Development Authority;
5) Hadejia-Jama River Basin Development Authority;
6) Lower Benue River Basin Development Authority;
7) Lower Niger River basin Development Authority;
8) Niger Delta River Basin Development Authority;
9) Ogun-Osun River Basin Development Authority;

10) Upper Benue River Basin Development Authority;

11) Upper Niger River Basin Development Authority;

12) Sokoto-Rima River Basin Development Authority.

Unfortunately, as the Newswatch Magazine (August 27, 2009) observes,

> […] these objectives are yet to be fulfilled 33 years after. Currently, Nigeria spends more than $2 billion annually to import 1.6 million tons of fish yearly. The country is also the highest importer of rice and wheat in Africa […]; the RBDAs have not been able to live up to the expectation of contributing to the nation's search for food security by reducing the country's dependence on rain-fed agriculture and increase the proportion of irrigated agriculture that would make possible two, and sometimes three, cropping seasons in one year.

Ultimately, the RBDAs experiment failed to boost the much desired increased food production for domestic consumption.

The RBDAs project was followed by the introduction of the National Accelerated Food Production Program (NAFPP). The year 1975 witnessed the birth of the Agricultural Development Projects (ADPs) intended to be extended to all Nigerian States and aimed to "[…] bring about increase in the production of foodstuff, income level of farmers, improved seeds, provision of pesticides, and fertilizers for farmers" (Omonijo et al, 2014:41). According to the Nigerian Federal Ministry of National Planning (1981) and Okojie (1991), one of the objectives of for the agriculture sector for this period of policy planning was to promote increased production of food and other raw materials to catch up with the increasing food needs of an ever growing population and rising industrial production.

The ADPs were found to be more serious, less capital intensive, food production oriented and smallholder-farmer centered, and therefore more favorable for boosting food crop production in the country. All these facts about the ADPs notwithstanding, it still failed to contribute much to agricultural development in Nigeria. This is more so considering the fact that against its relative advantage over and above the RBDAs and other projects,

> […] the Nigerian government continued to pour money into the large irrigation projects while underfunding the ADPs. For example, the large-scale irrigation projects got 72.7 percent of total agricultural expenditure in 1980 and 76.2 percent in 1981, whereas the ADPs got only 4.1 percent in 1980 and 8.1 percent in 1981 (Ake, 1996:51; Sano, 1983:39).

As would be expected, corruption among some highly placed Nigerians made the government to keep investing more money on the more capital intensive but unproductive RBDAs project because, as Ake (1996:52) documents, it "provided excellent opportunities for easy wealth."

Never tired of launching grand and large-scale projects in the name of agricultural development, the Nigerian government entered into another one, this time the Directorate of Foods, Roads, and Rural Infrastructure (DFRRI). Established on February 6, 1986 under the Directorate of Food, Roads and Infrastructure, DFFRI was said to be "[…] for the mobilization of rural communities and the development of the rural areas in Nigeria; and to charge the Directorate with diverse functions directed towards the improvement of the quality of life in the rural areas" 1987 No.4). DFRRI was charged with the comprehensive responsibility of improving rural agricultural production including the promotion of agriculture, improvement of rural infrastructure (roads, water supply, electricity, and transportation), encouraging food production through the provision of improved farming inputs and techniques, updated implements, and extension services. Accordingly, DFRRI began to get the highest share of national expenditure allocations than any other sector: N400 million in 1987 and N500 million in 1988, except as it was topped by the Ministry of Defense, which netted N717 million and N830 million in the same two-year period. In matters of actual results, DFRRI too became another huge disaster that made the Nigerian agricultural development plan a mere mirage that thrived only on rhetoric and political manipulation of paper publication. For, rather than become the accelerator of food production in rural parts of Nigeria where it was claimed local farmers were made to participate in the planning and execution of agricultural production, DFRRI turned out another Nigerian express road for

looting of public funds through dispensing huge rouge contracts. As such this too became a ready state apparatus in the hands of "a greedy and corrupt political class that set out to appropriate the huge resources of DFRRI" (Ake, 1996:53).

Within this same period in the overall on-going myriad of Nigeria's experimentations with agricultural development, Operation Feed the Nation (OFN) program was launched precisely in May, 1976. Born as a result of the chronic inability of the agriculture sector to satisfy the food need of the country, OFN was charged with the sole mission of re-enkindling in people the interest in agriculture. For example, in 1975 alone, the country recorded a food deficit of approximately 5000 metric tons and a food import bill as unaccountably high as N300 million, both figures representing an upward swing in the trends of preceding years (Igbozuruike, 1977). The aim of the program was two-fold: first, that Nigeria would attain higher level of food production—and thereby the assurance of self-reliance in food output; second, to inculcate in Nigerians, especially the youth and those in the non-agricultural sector, appreciation for the dignity of human labor (Orua, 1980:92). According to Obibuaku (1977), this second much more youth/student participation centered aim of OFN had three prongs: a) that as leaders of tomorrow, students should be made to work on farms and to appreciate the problem of the farming communities; b) to encourage students to appreciate the dignity of labor; and c) to make them get involved in the mass mobilization for food production that was going on in the country.

Unfortunately, two years after the operationalization of the OFN food production ideology, it became only an addition to the long list of woeful tales of failed agricultural development policies in Nigeria. The failure of OFN derives from its organizational and operational structure, which did not seem to differ any meaningfully from the inappropriate and inoperable antecedent bureaucratic structures of agricultural ministries the failure of which in the first place led to the

introduction of OFN (Arua, 1980). As a result of this the smallholder farmer who is the actual driver of the nation's agriculture-powered economy before the era of oil boom[78], was not reached by the scheme though it was claimed to be for the good of the smallholder farmer.

Another step Nigeria took in connection with agricultural development policies was the Structural Adjustment Program (SAP). Nigeria's economic crisis of the late 1970s and early 1980s, which manifested in budget deficit, sharp fall in real incomes, deterioration of terms of trade, and other negative economic downturns, led the military administration of Ibrahim Babangida to introduce the SAP policy in July of 1986; that is, ten years after its failed OFN forerunner. As is rendered by Sulaiman et al (2014:41),

> The structural adjustment programme (SAP) is an economic reform package suggested by the multilateral agencies (IMF and World Bank) for developing countries. Its core aims are to fuel local productivity, expand the economic base, realize viability in balance of payments, cause reduction in government expenditure, improve economic competence and boost the growth potential of the economy in order to move the developing countries forward (see also Poyi, 2006).

Many African and other developing countries including Nigeria embraced and adopted this initiative believing it to be a panacea to their seemingly economic problems.

Among the objectives of the SAP venture on the Nigerian scene include, to restore and diversify the productive base of the economy so as to reduce dependency on the oil sector and imports; to achieve fiscal and balance of payments viability over the medium term; and to promote

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78 The era popularly and rightly branded "Oil Boom Era" in Nigeria lasting from 1971 to 1977. In 1971, the share of agriculture to GDP stood at 48.23 per cent. By 1977, it had declined to almost 21 per cent. Agricultural exports, as a percentage of total exports, which was 20.7 per cent in 1971 dropped to 5.71 per cent in 1977. The discovery of oil in commercial quantity in the mid-1950s, coupled with the oil boom resulting from Arab oil embargo on the USA in 1973, affected the agriculture sector adversely. The economy became heavily dependent on oil. By this time oil revenue represented almost 90 per cent of foreign exchange earnings and about 85 percent of total exports. While the boom afforded the government much needed revenue, it also created serious structural problems in the economy.

non-inflationary economic growth. On the other hand these objectives of the SAP program are to be operationalized through a set of key policy instruments (GDN, 2010; Okojie, 1991).

Toeing this path was already "[…] precipitated by the assistance received or to be received from International Organizations like International Monetary Fund and the World Bank" (Sulaiman et al, 2014:41), and for this SAP was also dubbed 'Washington Consensus' (Heidhues and Obare, 2011). The deregulation of the SAP era enhanced the political class's interest in agricultural production only in so far as they could control agricultural surplus and benefits but neglecting real projects that conduce to real food production. It would not be surprising that in the SAP era, inflation assumed a doomsday scenario—5.4% in 1986 to 40.9% in 1989—and threatened to destroy the very fabric of the Nigerian society among its many other negative side effects (Anyanwu,1992). In the era of SAP also, rather than emphasize more strategies and programs targeting increased agricultural food production, political class interest was more on deregulation, especially "[…] the abolition of monopoly commodity boards" (Ake, 1996:54).

Another downside of the SAP era arises from the deregulation with which it was coded (Noorbakhsh and Noorbakhsh, 2006) as it was designed to the advantage of the same advanced nations whose initiatives it was and, of course, this resulted in the developing countries that followed it fairing no better than when they never did.

> In this process the advanced nations are perpetrating the present inequitable division of labour, selling their manufactured goods, securing raw materials and exporting their surplus capital with maximum benefits. While they preach deregulation, decontrol, free trade and the elimination of subsidies to poor nations like Nigeria they themselves control their foreign trade, and maintain welfare schemes and various subsidies (Anyanwu, 1992:20).

13.3 *Why Did Agricultural Development Programs Fail in Nigeria?*

To make a sweeping conclusion in appraising the plethora of everything that went/goes in the name of agricultural development in Nigeria from the 1970s through to mid-1980s and even

till the present moments by just stating that they did work would amount to running off the track provided by the mass of field-borne evidence gathered in this study and further buttressed by a wide and solid range of information from related literature in this area. To avoid the danger of political correctness that is often given rise to by euphemisms, this study puts the conclusion to the point: agricultural programs and the policies that operationalized them in Nigeria from independence have been a litany of unfortunate, costly but avoidable failures. Some evidence-based points of conclusion will be employed here to buttress this conclusion. Overall, this study totally agrees that the very many programs and initiatives floated by the different regimes of the Federal Republic of Nigeria have failed because they "[…] have yielded little or no impact on the rural population [….]" (Omonijo et al, 2014:42; Afolayan, 1997). A proof that they failed is that, among other issues, the rate of poverty in rural areas is on a steady increase (Gate, 2014; Handley et al, 2009; Diamond, 1999; Afolayan, 1997).

To further buttress why it is stated here that agricultural development programs and policies failed in Nigeria, the following points are unmistakable:

1) *They lack in vision, sustainable organizational structure and a future*. Having taken off on the footing of Nigeria (as with other SSA governments) wanting to become like the Western democracies whose industrialization became an archetypical model to aspire after, Nigerian post-independence political leaders hurried into said agricultural development programs that were not rooted in the sociopolitical conditions peculiar to their new and emerging democracy. While it is good to want to be like those ahead of their country on the issue of (agricultural) development, the problem, however, was that this mimicry floated policies and programs that were not weighed and well-studied to see if they fitted into and served the purposes of Nigeria. The fact that the development modeling they followed was not appropriately and contextually conceived and

planned, their execution also ended in the failure to which it was already logically and unavoidably headed. As such the processes of the formulation and implementation of agricultural policies in Nigeria were "[…] marred by gross irregularities" (Olaoye, 2010:82).

2) *Agricultural Development without Requisite Technology to Match Policies*: Characterizing the nature of agricultural development package post-independence Nigerian leaders embraced was the fact that they floated lofty policies that were not matched with requisite and appropriate improved technologies to realize the ideals of development they targeted. This gross oversight once again reinforces the fact, as has been stressed earlier, that the Nigerian government embraced the ideology of development without any clear vision. For, hardly has any industrialized nation, indeed no nations has been able to reach any appreciable level of agricultural productivity and overall economic wellbeing without updated technologies that are responsive to food demands of its citizens. Countless empirical studies have bourgeoned to make the case of the indispensable role of improved technology in mitigating poverty and food insecurity in SSA as in other parts of the world. Yet, the primordial agricultural development policies and initiatives launched by Nigerian political leaders glossed over this very important issue. Citing as a case in point, we recall that,

> […] although the General Obasanjo's administration made attempts to establish Universities of Agriculture and Technology, these institutions suffered from inadequate funding occasioned by corrupt practices and lack of mechanized equipment that would have developed the Nigerian agricultural sector to make Nigeria self-sufficient in food production (Olaoye, 2010: 84; see also Evans, 2004).

3) *They were often Too Broad and Lacked in Specifics*: It would not be surprising that because the many things that were undertaken in the name of agricultural development programs in Nigeria lacked in vision and purposefulness, they were also too broad and spread out across a wide range of things to the detriment of specific, feasible and manageable goals. A practical example is the National Accelerated Food Production Programme (NAFPP) of the Military Regime of General

Gowon. NAFPP became a woeful failure and waste of resources as it achieved no tangible results due to too many diverse goals. The same lesson is learned from the Operation Feed the Nation (OFN) agricultural development program which, in addition to being too broad to be specific,

> […] expended much material resources on ill-prepared agriculture undergraduate who were meant to teach farmers about (*sic*) how to farm. The result was failure of the policy as the undergraduates were only teaching the farmers the theory of agriculture ignoring the vital practical aspects (Olaoye, 2010:84; see also Maduagwu, 2008).

4) *They lack in Continuity and Coordination*: As can be seen from the line-up of agricultural development programs and policies of the Nigerian government from independence till decades later, it was a matter of who was in charge as President and what mattered to him and his regime. Every regime initiated new programs in the face of existing ones inherited from the previous regime and, sometimes even after the current regime introduces one program, yet many more are brought upon it: this is typical of all the regimes especially as in the case of Ibrahim Babangida. As Arogundade et al (2011) rightly doecuments,

> […] it was revealed that the governments in power often seek to introduce their own policy and in the process, any other policy inherited from successors are gradually either abandoned absolutely or rendered impotent. It was first thought that lack of succession planning (*sic*) was responsible, but in the process, it was observed that some governments even watch their baby programmes dying prematurely to give birth to another (Arogundade et al, 2011:42).

5) *They Ignored and or Excluded Indigenous Technical Knowledge (ITK)*: The knowledge and precious experience of rural farmers who are major stakeholders in the business of agricultural development in Nigeria were not considered in the formulation and implementation of policies that affect them in many and varied ways. Neglect of the participatory approach, which involves farmers as major key players in agricultural development outfits, therefore, contributed in no small measure to the failure of the policies. As Johnson and Okigbo (1989) put it, the various policies affecting agricultural development in Nigeria constrained the participation of the organized private sector and stretches as far as inhibiting their embarking on mechanized farming as government

policies stress and give priority to state ownership of farms and settlements to the neglect of independent small holder farming households (see also Olaoye, 2010).

6) *Meritocracy was not followed in Selecting Personnel*: It was common to see people with no knowledge and no experience in the science/art of policy making placed in high political positions relating to the processes of agricultural development policy making in Nigeria. As such policy making became the work of unskilled, less educated politicians or people appointed by politicians and almost always for either party alliance or to make sure that those in such offices are people who would protect and cover their indecent and corrupt tracks. This method of putting in policy making positions only people who are aligned with the *above the law*, prebendalist manipulations of political leaders also taps into, and bespeaks, the sociopolitical landscape in which agricultural development policies were entrenched in Nigeria. In this condition of lawlessness, both the man who appoints and those he appoints to such offices play in a common field where they cover each other in swindling public resources, which is why they got into those positions in the first place.

7) *Violent Conflicts and Wars Impede Policies*: The core point of the fifth factor above is either the effect or the cause of conflicts and wars the ultimate result of which was the prevention of the implementation of agricultural development policies even if they are good and farmer-centered. While Ake (1996) and Olaoye (2010) stress the role played by conflicts and civil unrest in inhibiting the success of agricultural development in Nigeria, the latter goes further to account that the 1967-1970 total war of fratricidal consequences (Uwalaka, 2003) forced USAID out of Nigeria permanently. This is because that war furthered the destruction of the few agricultural development projects, establishments and various agricultural research centers USAID made in Nigeria. The frequent violent military take overs that marked the history of the nation, which truncated the

democratic process precipitated a scenario of political instability that stands in the way of successful implementation of agricultural development policies.

8) *Refusal to Learn from Previous Failures*: If the policies were regime-centered, it also explains—even if partly—why the regimes turned blind eyes on the lessons of their earlier failures in order to come to grips with why they failed, and so to grapple with what could be done to make follow up agricultural development policies successful. This in itself is an offshoot of the point made earlier on the fact that those in power appoint to policy making positions who lack the qualification. The fact that the appointees lack in what it takes to deliver the demands of the position in addition to the fact that success of the policies was not the primary concern of those in power work in concert to demonstrate that the wellbeing of rural farmers claimed to be the aim of the policies—was never the priority of Nigerian politicians. This is why when one project or program failed in their face they zoomed right away into yet another without any stocktaking to see what went wrong and how it could be corrected for better results.

9) *Closed to Successful Exemplars and Genuine Public Opinion*: Refusal to draw lessons from developed nations and the genuine, technical know-how they employed to come that far confluence with the repressive, above-the-law attitudinal disposition to the public opinion of Nigerian politicians so much that all they depended upon in operationalizing already disappointed policies were their insights alone. Contrary to the invaluable usefulness of public opinion and the critiquing voice of the press and media (Hall, 1993) all of which are necessary tools for advocating appropriate changes in a democratic process (Parkinson, 2004), Nigerian political leaders operated without the active involvement of these tiers of society and so ended in failure.

10) *Corruption and Misappropriation of Public Resources*: It does seem that the only thing that makes sense though nonsensical itself is that corrupt and self-enrichment to the detriment of

everybody else and even to the total neglect of agricultural development in Nigeria is corruption and misappropriation of public funds that otherwise could have been ploughed into development. Johnson and Okigbo (1989), Ake (1996), Maduagwu (2008) and Olaoye (2010) are only a few among scholars who have identified corruption as the key factor standing in the way of agricultural development in Nigeria. As a matter of fact, the earlier lax approaches of formulating and executing agricultural development policies seem to be technically prepared in such as a way as to create further and intractable loopholes for easy looting of public funds even after such funds have been set aside for the purposes of agricultural development. Getting into politics in Nigeria has been one sure way of having access to public resources including land related resources, even when land for actual food production is blocked to real farmers. When and where farmers are denied land, politicians and their henchmen easily acquire "[…] certificate of occupancy of large expanses of land for speculative purposes such as securing loans for their private businesses" (Olaoye, 2010: 85).

13.4 *Conclusion: Chapter Summations*

The analysis of Nigeria's agricultural development strides lead to some conclusions.

1) Post-independence political leaders launched many agricultural development programs along with a plethora of policies to implement them.

2) Majority of those programs bore little or no results leaving farmers poor and hungry.

3) Many reasons account for why those programs failed and include lack of vision; lack of requisite technology; too broad and lacked specific goals; they lacked in continuity and coordination; they were not participatory and so left farmers out; they sacrificed merit on the altar of party alliance; conflicts inhibited them; they did not learn from previous failures; they failed to borrow insights

from developed nations; and corruption and misappropriation of public funds being the biggest snag in its way.

Chapter 14: Oil and Agricultural Development in Nigeria

14.1 *General Overview*

This chapter is a derivation—from the previous 13 chapters of this work; it further examines the situation of agricultural development in Nigeria. It puts into historical perspective what was the state of the nation's economy before and after the discovery and exploitation of crude oil in the country. By making a comparison of what happened to the nation's economy when it was agriculture-dependent in the 1960s with the era of oil boom in the 1970s and 1980s till the downturn experience of oil prospects in the world, the chapter points out and emphasizes how policy instruments instituted by the Nigerian government against the agriculture sector have continually reinforced the problems of reduced agricultural production, mass out-migration, unemployment, poverty, poor socioeconomic standards, fall in the overall GDP of the nation due to losses in the agriculture sector's contribution among many other problems. In a special way the chapter examines how communities in the oil-rich areas of Nigeria have fared with the situation of oil exploration especially in relation to agricultural production. Among its many targets, this chapter aims to bring to a sharper focus the high cost of overdependence on one aspect of Nigeria's economy—the oil sector—to the neglect and exclusion of another even more important sector—the agricultural economy. If the chapter misses anything it would not be striking the point of how policies against agricultural development have failed in Nigeria (chapter 13) on the one hand, and how it is that Nigeria's agricultural development itself could have done better with appropriate recognition of the place and role agriculture occupies in the country, on the other. Ultimately, the chapter serves the crucially important purpose of comprehensive study of the conditions that conduce to appropriate, relevant and evidence-based response to the findings of this case study by

showing the way as to how agricultural development could and should work in order to reclaim its place in the nation's overall economy. The chapter taps deep into related literature on this subject.

14.2 *Agriculture in Nigeria's Economy before the Birth of Crude Oil* (1960-1970)

Nigeria is one of the countries of the world prodigally rich in crude oil deposits. In world ratings Nigeria is Africa's largest producer of oil and occupies the sixth position among oil-rich nations of the world. It would not be surprising that Nigeria's economy depends predominantly on oil proceeds (Adedipe, 2004). Prior to the discovery and exploration of oil, however, Nigeria's economy got its boost from the agriculture sector, both for growing its domestic food and industrial raw materials purposes and in terms of foreign exchange earnings (Asoya, 2010; Igbokwe, 1983). Nigeria's post-independence agricultural economy was powered by the cash economy it inherited from the colonial plantation mono cash cropping. Nigeria adopted this agricultural policy posture modeled on the ideological understanding that this mono-crop economy would give the nation more revenue from exports. Invariably, Nigeria began to de-emphasize the multi-crop farming of million pockets of smallholder peasant producers whose tremendous contributions to the national economy cannot be overemphasized.

The major cash crops that netted substantial foreign earnings through exports included cocoa, groundnuts, cotton, palm oil and palm kernel (Oluwasanmi, 1966; Forde and Scott, 1946) all of which had ready foreign export markets. This trend of delving into, and depending on, cash crop to grow the economy and step up to an industrial state also dominated the economies of other emerging Sub-Saharan African nation-states. As has been severally noted, approximately 80% of West Africa's population is engaged in agricultural production as their source of livelihood; this was and still is the case with Nigeria (Nweke, 1981). It would not be surprising, then, as Wen (1982) documents that in the 1960s Nigeria was a leading exporter of cocoa, cotton, palm oil, palm

kernel and groundnut. Knight (1982) corroborates this: "Farming for exports was the mainstay of colonial Nigeria, whose modest viability was based on palm oil, rubber, cocoa and groundnuts."

While it is the case that some local farmers grew these crops, the plantations were mostly owned by expatriate companies which hired cheap labor from among Nigerian indigenes. These facts account for why the agriculture sector accounted for approximately 65% of Nigeria's GDP between 1962 and 1963 on the one hand, and 63% of its GDP between 1966 and 1967 fiscal years, on the other (Ekundare, 1971). The table that follows (14.1) gives a good idea of how the agricultural economy of Nigeria continued to grow steadily and progressively between 1960 and 1969. As figures in the table indicate and further confirmed by the United Nations (1981) and Igbokwe (1983), agricultural production was fairly stable within this period. The decline of 1967 is accounted for by the Nigerian-Biafran Civil War.

The great performance of the agriculture sector of this era is earmarked by the fact, according to Igbokwe (1983:19) that,

> Within this period in question, Nigeria imported little of no food items. In fact, they exported a lot of agricultural products. The booming agricultural production led the government to establish farm settlements and providing each community with an agricultural officer who supervised the progress in the area as well as serve as an information link between the farmers and the government.

Table 14.1: *Major Agricultural Production for 1960-1969 ('000 metric tons and '000 heads)*

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Cocoa	189.2	193.9	178.8	219.6	298.3	184.6	267.2	238	191.8	220.8
Coffee	0	0	0	0	0	0	2	3.1	3.2	3
Cotton	30	52	29	49	44	44	52	27	56	92
Groundnt	1150	1245	1515	1393	1251	1687	1693	1558	1813	1846
Cattle	0	0	0	7445	7470	7515	0	0	0	0
Maize	1143	900	1118	1105	1130	914	707	688	816	910
P-Kernel	430	437.1	368	420.3	497.9	456.4	421	241	214	255
Palm-Oil	552	541	509	510	515	530	551	320	336	418
Rice	360	340	350	330	400	350	200	301	275	282
Wheat	0	0	0	0	0	0	0	0	0	0

Source: *1979/80 Statistics Year Book (p.724)*

Table 14.2: *Major Agricultural Production for 1970-1980 ('000 metric tons and '000 heads)*

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Cocoa	304.8	256.6	241.1	215	214	215	165	202	160	180	175
Coffee	2.8	4.2	4.2	2.3	2.4	3	3	3	2.6	4.5	3
Cotton	39	35	48	48	30	52	61	81	37	37	30
Groundnt	1581	1554	945	350	400	280	500	300	450	540	570
Cattle	11183	11293	11103	10920	10918	11000	0	0	11800	12000	12300
Maize	1046	755	857	547	1215	1260	1300	1350	1480	1500	1550
P-Kernel	315	307	270	231	310	300	295	302	239	335	345
Palm-Oil	488	500	460	590	600	640	655	660	670	650	675
Rice	343	388	310	487	525	515	387	408	515	600	725
Wheat	19	20	20	15	18	18	20	21	21	21	21

Source: *1979/80 Statistics Year Book (p.724)*

14.3 *Agriculture in Nigeria's Economy During the Oil Boom Era* (1970-1980)

The gain and progress Nigeria made in the 1960-1969 period thanks to agricultural production and the sector's contribution to GDP through exports began to fall and steadily too. This development was as a result of three social facts. First, the government took to an (agricultural) development policy that favored imported food items to the detriment of domestically produced ones. This policy instrument subsidized tariff for imported agricultural goods, which were in turn cheaper; this is in addition to the protectionism the government provided big industries (Knight, 1982). These policy measures crowded small farmers out of the industry of agricultural production and became a major discouraging factor to farmers. At the same time it fostered further mass migration from rural to urban areas since oil created jobs in cities. People lost interest in farming and went in pursuit of oil-related jobs even without any meaningful education or technical skills. Knight (1982) observes, "Oil has monstrously speeded up the rush to the towns to work for the government, on government contracts, or to service those so employed."

The economically crushing impact of all this is that, with less and less hands available for farming in rural areas, the level of agricultural productivity continued to fall creating more

problems of food insecurity in the country. With the peak of the oil boom setting in between 1970 and 1980 the Nigerian government entered into larger expenditure, netted more revenues; this in turn became ready and easy avenues for corruption, which loomed even larger. With oil empowering Nigeria with more revenue through expanded exports, Nigeria's GDP rose from N5, 125 million in 1970 to a staggering height of N28, 716 million in 1978—an increase of about 46% (Igbokwe, 1983:33). Unfortunately, all these huge oil-related foreign earnings did not reflect in more and better investment in the agriculture sector; instead the neglect of the sector got worse.

The second hitch came from the leash of longing to get into development—which was the goal of the government and its policy formulators. This intensified mass migration from rural to urban cities and a corresponding sharp drop in the strength of workforce in farming communities. As would be expected, this ultimately resulted in reduced agricultural productivity especially as a great percentage of those who migrated to urban settings did so in order to pay back the government for establishing cheaper grain price policies, which favored urban dwellers. As such farmers intentionally began to produce less than their potential. As a result of this confluence of conflicting factors Nigeria began to experience shortage in grain production as well as other agro goods. As such the same country that was a major exporter of agricultural goods became a major importer of the same with the result that much of the nation's earnings was expended on imports. For example, Nigeria imported 1,700 tons of rice in 1970, which increased very alarmingly to700, 000 tons in 1979 with a disturbing difference of 698,300 tons within a ten-year period.

The third and more telling reason Nigeria fell back very drastically on food production to the point of inability to feed itself is the discovery and mass exploration of oil. Prior to the oil boom era agriculture contributed greater part of the nation's earnings and was the greatest contributor to its GDP. Correspondingly, agriculture attracted the largest portion of the country's

annual investment allocation. But with the discovery of oil[79] and it mass exploration in follow up years, the scale tilted against agriculture both from the point of view of its contribution to national GDP and with respect to the amount of investment funds allocated to it. To come to the specifics of this contrasting point, it is worth recalling that prior to the advent of oil boom in Nigeria the agriculture sector contributed 64% of GDP in 1960; but with the oil boom era it managed to contribute a meager quota of 14% losing as huge as 50% of its original contribution to the GDP.

If this became the case it is not because farmers stopped producing; this is rather traceable to the fact that "development" policies elbowed agriculture to a negligible fringe. Agriculture was very much neglected for a more preferred profitable "short-term" GDP lion shareholder, that is, oil wealth. The two major phases of oil boom in Nigeria, which spanned between1970-82 and reaching its peak from 1973-1978 (Ake, 1996) not only failed to boost agricultural production but rather produced and reinforced its neglect. The implication of it all is that in the oil boom of the period, "[…] export earnings increased from 1,000 million naira in 1971 to N13,000 million in 1980." This meant that it produced a corresponding negative effect of neglect of agriculture, which produced corresponding food crisis and further inflation. What shows the consistent trend of neglect of agriculture in the era of oil boom is the reversal of investment allocations, which pushed agriculture to an insignificant margin.

> With the oil boom the significance of agriculture was reduced. Agriculture, which accounted for 75.9 percent of total federal revenue in 1965 was contributing only 2.4 percent by 1980; in contrast, petroleum's share rose from 2.7 percent in 1960, to 73.7 percent in 1971, to 96.1 percent in 1980 (Ake, 1996:49; see also GDN, 2010:2).

79 As a matter of accurate history, oil was first discovered in Nigerian in 1956 at Oloibiri in the Niger Delta after a half century of exploration. The discovery was made by Shell-BP, at the time the sole concessionaire. With this discovery Nigeria joined the ranks of oil producing nations in 1958 when its first oil field came on stream producing 5,100bpd. After 1960, exploration rights in onshore and offshore areas adjoining the Niger Delta were extended to other foreign companies. In 1965 the EA field was discovered by Shell in shallow water southeast of Wari (Odularu, 2008:6).

The above situation is not surprising considering the fact, as Oluwasanmi (1966:v) put it, that in Nigeria, "Lip service is often paid to the importance of agriculture, but it is commonly believed that industrialization holds the key to increased national wealth." Usually, and as would be expected, farmers were the immediate group to be hard-hit by this negative development. As Adejugbe (1981) writes, "The decline in agricultural production and its falling contribution to GDP, reveals the gradual drop in income of the rural population" considering especially the fact that about two-thirds of Nigeria's population lives in rural agrarian niches (Igbokwe, 1983:22).

As usual, this upside-down turn of events in agricultural production versus crude oil created yet another occasion for some of those visionless random and sporadic responses of official government. Amidst this economic turmoil the government regime in power established the Operation Feed the Nation (OFN) in mid-1970s. OFN was followed up in 1980 by the launching of the Green Revolution initiative (and the many other such programs as were discussed in the previous chapter, 13). Incidentally these two programs were laden with similar if not the same objectives including to increase self-sufficiency in the agriculture sector; to improve the welfare of rural people; to boost agricultural production; to ensure rural development for agro-based industries through the construction of feeder-roads, provision of housing, education, health, clean water and electricity infrastructure in rural areas. However, like those before and after these two programs, they amounted to nothing when juxtaposed against the lofty promises they projected.

14.4 *Other Impacts of Oil in Relation to Agricultural Production in Nigeria*

Over and above the direct and immediate impacts of Nigeria's over dependence on oil in making the agriculture sector be neglected with the attendant consequences of shortage in food production, steady backwardness of agricultural development due to drastic reduction of investment funds allocated to it, mass rural-urban migration among others, there are other effects

this trend has had and still has on the entire nation especially as it pertains to food production. Among them is the fact of environmental degradation and destruction of delicate ecology in the communities where oil is being drilled. All this makes the production of food very difficult and result in inadequate food supply even among agrarian communities. For example, many social scientists including Irhivben and Omonona (2013:59) lament that, "Oil exploration has led to environmental problems in the producing communities […] and has virtually affected livelihood outcomes such as low productivity, low income, reduced food security and severe health hazards among farming households."

Furthermore, oil exploration in Nigeria causes many farming families and communities to lose their plots of land—often ranging into hundreds of hectares—so much that they are left with no meaningful farmlands to continue their agricultural production enterprise. This phenomenon has intensified food shortage, hunger, unemployment, mass out-migration, frustration, conflict, poverty, and general poor socioeconomics among affected farming communities. On the other hand, farming families and communities lose mass expanses of land in the process of oil exploration through the laying of pipelines, construction of pipeline terminals and platforms. Resultantly, these environmental interferences have brought about serious concomitant effects including but not limited to complete changes in the social, economic, cultural and institutional life of the communities so affected (Okoli, 2006).

From yet another but closely related perspective, crude oil exploration has been responsible for more damages inflicted on soil and water natural dispositions. This is due to environmental pollution and contamination resulting in detrimental effects on soil biota, composition, quality and fertility for crop performance (IPS, 1990). Omuta (1985) pushes the same finding to the fore by stressing the fact that one thing among many that is easily observable in oil-bearing communities

is vegetal destruction usually through the construction of camp sites, flare sites, drilling rigs, flow stations, saver pits, the laying of pipelines among others. A few photos represented in Plates 14 A-D below illustrate the points on the environmental and hence agricultural impact of oil in Nigeria.

Plate 14A: *Fishing Body of Water Destroyed*

Plate 14B: *Indigenes Struggles with Finding Water*

Plate 14C: *Oil Related Environmental Pollution*. **Plate 14D**: *A Fisher Struggling to Get a Catch*

Whereas it is the case that exploration of crude oil in Nigeria affects agricultural production in many and various ways—as we have tried to demonstrate in some earlier portions of this work, it is more the case that communities in oil fields suffer the telling impact of environmental destruction because they are directly affected by the activities of the many competing oil companies in operation. This is illustrated in Plate 14E below. Inhabitants of the affected

communities, which were known for mass production of food and fish have now become food hungry with high rate of unemployment and daily increasing incidence of frustration and violence.

Plate 14E: *Mapping of Nigeria Indicating Areas Directly Affected By Oil Exploration*

As Isichei and Stanford (1996) also document, oil exploration in the affected Nigerian communities brings about the suppression of plant growth resulting from the effects of gas flares and the generation of tremendous heat (Omuta, 1985) all of which significantly impact people's lives by diminishing both the quantity and quality of agricultural productivity. Neither can the health related hazards caused by oil exploration and exploitation be overlooked. As Idoniboye-Obu (1992) and Irhivben and Omonona (2013) observe, these activities bring about disturbances of ecosystems through pollution thus leading to the poisoning of myriad of food chains that bring about cancer-related mutations.

Last but not the least among the many ways the activities of crude oil exploration destroys life of the environment is the fact that it puts aquatic systems in serious jeopardy. These activities distort beaches and above all depletes fishery potentials just as they often close out bodies of water by covering their surfaces with mass of oil industrial wastes so much that aquatic biotic life

underneath is suffocated. This in turn brings about increased shortage in food chains. Similarly, crude oil wastes destroy grazing lands to the point that livestock farming has become a luxury for local farmers; even in areas animals could graze at all, the plants are laden with so much poisonous chemicals that are most unhealthy for animal life and survival. Ultimately, this adds to reduction in food chains and to farmers' experience of poverty, unemployment and food insecurity.

14.5 *Conclusion: Chapter Summations*

This chapter was crafted derivatively and has led to the following conclusions:

1) Post-independence Nigeria had its first economic prospects from the agriculture sector of its economy especially in the period of 1960 to 1970.

2) Agriculture was the largest employer of the predominantly rural agrarian population, and was also the largest contributor to the nation's GDP.

3) The agriculture sector led the way of the economy in the emergent Republic through the exportation of its major cash crops including cocoa, cotton, groundnut, palm oil and palm kernel.

4) Having thus assumed the role of the nation's major economic driver, it also began to attract the largest share of investment funds in the country's annual budget.

5) With the discovery and mass exploration of crude oil in the country, Nigeria turned its attention away from agriculture and so its development suffered and still suffers major setbacks.

6) Nigeria became totally and overtly dependent on oil to the neglect of the agriculture sector.

7) Development policies were exclusively focused on oil prospects scaling out agricultural economy; worse still most if not all the development programs did not bear any meaningful results except fostering more waves of corruption through easy looting of "development" resources.

8) This development policy posture has caused Nigeria so many negatives including poverty of the highest order especially among rural dwellers, mass out-migration, dire food shortages

resulting from reduced agricultural production, importation of agro goods, hyper-inflation and eventually the economic crunch of recession.

9) The oil-inclined policies have brought with them destruction of natural environments in oil-rich communities resulting in reduced agricultural productivity both in crops, livestock, and fishery.

10) Health of rural dwellers of affected communities has also been exposed to telling dangers.

11) Rather than be a huge blessing to the entire nation, oil revenues end up in the hands of a privileged few especially the politically connected leaving rural farmers in the squalor of poverty.

12) Having thus been excluded from the benefits of oil even on their own soil, members of affected communities have often taken to violence and destruction of oil-related facilities.

Chapter 15: Towards Appropriate Agricultural Development in Nigeria

15.1 *Introduction: Looking Back—A Few Snapshots*

We started this project with wondering aloud why agricultural development has failed in Nigeria as in other parts of Sub-Saharan Africa where, by virtue of this failure, the incidence of poverty and food insecurity has remained very high (World Bank, 2005a, 2005b; Adeyemi et al., 2009) and indeed rated the highest compared to other regions of the world (Eicher, 1982; USAID, 1997). The situation gets even worse over time with the continually growing population of the region, which outpaces its food production capacity. This is more so with the escalation of violent conflicts and new brands of war at different parts of the region as have been richly documented by many studies including Kimenyi et al (2014), Morgan and Solarz (1994), Richardson and Sen (1996), Collier (2006), Achodo (2000), Porter et al (2005), World Bank (2007) Arias, et al (2013) among others. These and other factors account for why area is ditched in importation of food on which it expends resources that otherwise could have been invested in domestic development.

In like manner we identified other more important earlier positive development oriented dispositions on the one hand, and some causally related facts bordering on the failure of the agriculture sector in SSA, on the other. Pooling from these two parts we represent these facts as including but not limited to 1) that at independence the agriculture sector of Nigeria fared well; 2) it was the highest contributor to its GDP and also scored highest in terms of foreign exchange earnings in addition to being the highest employment provider especially for the rural poor (Ake, 1996, Oluwasanmi, 1996); 3) it stood the chance of leading the region to the much needed overall social and economic transformation; 4) that all these faded away like a mirage due to brutally violent infighting for political power and inordinate drive for wealth accumulation on the part of political leaders of post-independence SSA nation-states (Ake, 1996); 5) that this went hand-in-

glove with corruption which was perpetrated by the same political leaders (Ake, 1996); 6) that, as a result economic development in general and agricultural development in particular never got started (Ake, 1996); 7) it never got started because it never was prioritized by political leaders of Nigeria as with other nations of SSA; 8) when they ventured at what they floated at all in the name of agricultural development it was a succession of failed projects and programs that never responded to the urgently needed agricultural development revolution; 9) that the revolution never happened because what the region embraced as agricultural development did not reflect Africa's real conditions; 10) as such the contribution of the agriculture sector fell drastically within the first two decades after independence and has not yet regained its place in the nation's economy; 11) that all these indices of failure were recorded because of policies that were unfavorable and have remained unfavorable to the agriculture sector; and 12) that the agriculture sector still portends to helping Nigeria and the entire SSA region overcome the bottlenecks of food insecurity, hunger, poverty, unemployment, and other problems with which the sub-continent is saddled.

Over and against this background of general socioeconomic backwardness of Nigeria and SSA (Easterly and Levin, 1997) we identified some key points: first, that the rural poor constitute over 70 per cent of the region's overall population; second, that this same rural poor embrace agriculture as their predominant occupation (Morgan and Solarz, 1994; USAID, 1997); third, that this same population category of SSA produces up to or more than 90 per cent of the region's food need (Ibeawuchi, 2007; Ake, 1996); fourth, that as a result the agriculture sector is the highest employment provider for the populations; fifth, on the strength of these facts, we postulated and argued, as did USAID (1997), Ake (1996) and FAO (2009) among others, that "[…] agriculture must be the engine for economic and social progress" because it portends to poverty reduction and ending of the assaults of hunger and general economic backwardness of Nigeria and all of SSA.

In light of the foregoing recapitulations on the one hand, and more so on the strength of our study findings, we see it to be the case that our take-off assumption—that every human activity takes place in multilayered conditions and complex situatedness where it is affected and shaped by many factors—has great merit. Among the factors we found very significantly impacting agricultural development in Nigeria in many negative ways include:

1) In agricultural production, Nigerian rural farming households are still stuck to the use of old and unimproved tools and techniques, which strike below expected quantity and quality of produce.

2) The seeming inertia of these farmers to adopt new farming technologies that conduce to boosting productivity is explained by a group of factors including and especially poverty, lack of requisite capital, lack of the know-how for managing complicated technology being consistently deprived of the knowledge that is supposed to be provided by agricultural extension service agents.

3) Worse still, Nigerian and SSA farmers are not provided with capital assistance by their governments leaving them unaided in the face the high huddles of expensive new technologies making it impossible for them to meet desired production levels for domestic and export purposes.

4) In Ukum-Nigeria and many parts of SSA the tenures of land rights and holdings, which are defined and regulated within the social organization of the communities in turn produce normative and hard-to-overcome gridlock limitations: they dictate who is and is not entitled to cropland the size of which continually shrinks in the face of ever growing population. Overall, this limits the extent of farmers' production potential.

5) By the same token of land tenure defined and regulated by the social organization of the people, many Nigerian-SSA communities exclude women from land rights and ownership—just because the tradition stipulates so—though they contribute more to the region's agricultural production.

6) Crucially important especially for agricultural production in Nigerian communities, land often constitutes heavy conflict-related crises that in turn very gravely inhibit agricultural development.

7) Conflict blocks growth in agricultural development in Nigeria especially because it usually revolves around the same most contentious asset, land, as farmers' most highly prized possession, hence conflict's association with high rate of diseases, human mortalities, and food insecurity.

8) With the prevalence of conflicts in the region, it is found that drones of the farming population especially the youth migrate to urban areas thereby reducing the strength of the workforce with the concomitant effect of significant shortage in food supply and other related problems.

9) Related to the migration of rural farming population in Nigeria and SSA to urban areas is its direct consequence in making hired farm labor rather expensive, which altogether increases overall cost of agricultural production and invariably the prices of agricultural goods both for domestic consumers and those for whom agricultural goods are industrial raw materials.

10) The above fact notwithstanding, the study found that labor for agricultural production in Nigeria as in many parts of SSA is still largely institutionalized and organized around kinship ties with the advantage among others that it reinforces social solidarity and reduces cost of hired labor.

11) Early marriage, low education, and large family size constitute short and long run hindrances to agricultural development in Nigeria, however, each in its own way, and all in concert.

12) Nigeria and SSA is backward in agricultural development above all because of backwardness in the installation and maintenance of infrastructure without which no economies thrive.

13) However, if these factors militate against agricultural development which, ipso facto, has lost its place in the overall macroeconomic performance of Nigeria and other parts of the region, it is above all because there has been a consistent official militarization of unfavorable policies against the agriculture sector itself. The case of Nigeria's oil economy policies typifies this phenomenon.

15.2. *Looking to the Future: Towards Pro-Poor Policy Recommendations*

The results of a well-conducted and analyzed case study also disclose and point to exit paths out of and beyond the problems that manifest. We think that in applying the scientific techniques of anthropology we have gainfully engaged in the exploration of the complex situation of the crisis facing agricultural development in Nigeria and acts as a mirror in the case of SSA. At this this point we can assert with some tone of certitude, that we have assuredly come to know—very scientifically—some major factors impacting and impeding the prospects of agricultural development in the region. Since the last of the four questions guiding this study is focused on finding out what could, and must, be done to remedy the problems of poverty, food insecurity, unemployment, mass out-migration and other problems associated with the failure of the agriculture sector in Nigeria, we dedicate the last two sections of this chapter to responding to that question. Aligning study findings side-by-side with insights from the literature consulted in this research as in data analysis indicates that the answer to that question is closer than far-fetched.

The task before us now is to show how the application of appropriate policy tools portends to making the agriculture sector assume a position to help it respond well to the problems of hunger, poverty and food insecurity by making great, impressive and sustainable contributions to the overall economic growth of the region. In response, therefore, we propose the introduction of a realistic pro-poor agricultural development strategy in Nigeria and SSA; indeed, one that identifies and responds very elastically to the conditions that are peculiar to the situation of SSA communities. This call for the introduction of pro-poor agricultural development strategy propped up by favorable policy instruments has become more imperative than ever seeing that the initial capital errors of unfavorable policies failed to provide for agriculture the fertile sociopolitical and institutional environment to enable it fulfill its mission of ending hunger and poverty reduction

among other ways the sector contributes to the socioeconomic transformation of SSA. Absence of appropriate policies is reason the United Nations' Global Monitoring Report (2006) chronicled the region's performance as the lowest on all counts of measuring economic performance across the globe. This also explains why

> The region is off track to meet every Millennium Development Goal [and] has the highest rate of undernourishment, with one-third of the population below the minimum level of dietary energy consumption [….] (UN Millennium Project, 2005).

For the same reason, the cross-regional assessment of SESRTCIC (2007; citing World Bank, 2002) confirms that,

> A review made by the World Bank, to find out to what extent progress has been made on reaching the above mentioned goals, suggests that most countries [of SSA] are off the track on most of the targets and will need to increase the rate of progress. However, countries in the Southern Africa seem to be on the track.

The core rationale of our argument here is couched on the following points: 1) "Agriculture still accounts for about a third of the region's GDP"—notwithstanding all the challenging odds it faces (World Bank, 1993a: 109); 2) "Agriculture is the area where policies touch the lives of the majority of people" (Ake, 1996:45); 3) the people under reference are largely farmers and produce greater part of the food need of the region and contribute immensely to the its GDP and foreign exchange earnings. On the strength of these and related points, we argue that something needed to be done, and urgently too. Our study findings suggest no other action more appropriate in this regard but the reversal of the same policies that exiled the agriculture sector; or better still the introduction of economic policies that favor the performance of the sector. What we propose is something some Africa and other world nations have done and ended in long run positive results of it. By economic policy we mean an "[…] action statement of the government pertaining to particular sectors of the economy, describing the intended objectives and how to achieve them."

(Adedipe, 2014:1). We agree with Adedipe (2014) that, ordinarily the object and aim of every well-meaning economic policy is the welfare and general short-long term wellbeing of the people.

15.2.1 *Botswana: A Success Story—Dividends of Choosing Pro-Poor Policies*

The illustrative practical case in point which we pull in here from the African continent is the instance of Botswana whose economic success has merited it the iconic place of glory as "An African success story."

> Botswana has had the highest rate of per-capita growth of any country in the world in the last 35 years. This occurred despite adverse initial conditions, including minimal investment during the colonial period and high inequality. Botswana achieved this rapid development by following orthodox economic policies[80] […] *good policies were chosen in Botswana because good institutions* […] *were in place* (Acemoglu et al (2001:1; emphasis, ours).

To further underscore why Botswana is a strikingly challenging instance and so to validate the kind of policy adjustment and repositioning in favor of agriculture sector that we call for here, we recall with Acemoglu et al (2001) that, at independence the country did not start out with favorable initial conditions. "When the British left, there were 12 kilometers of paved road, 22 Botswana who had graduated from University and 100 from secondary school"[81] (p.1). Against these high stake odds, Botswana made an in-ward look to find out, and embrace, the realities that are particularly peculiar to its sociopolitical, economic, ecological, and of course, cultural conditions and turned them into the economic revolution that makes the nation stand so tall in the history of Africa especially in matters of socioeconomic and political turn-around. This is why

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80 Approached from its religious connotations, "Orthodox" means "correct" (*orthos*) and "belief, teaching" (*doxa*), namely, correct belief in Greek. In the context of the social science, Economics, it is used for applications that are about generally accepted views and traditions in economics; as such, economic policies that are made of generally accepted applications are named orthodox economic policies. Its opposite, "Heterodox," is made up of two Latin words, "different" (*heteros*) and "belief" or "teaching" (*doxa*); and the word is used for naming applications except traditional views and approaches.

81 Our source further furnishes that, "There was no university in Botswana at independence and most of those who acquired even a secondary education were the children of chiefs who attended schools for Africans in South Africa such as the famous Fort Hare College where Nelson Mandela also studied" (Acemoglu et al, 2001).

many studies including those of Harvey and Lewis (1990), Good (1992), Leith (2000), Colclough and McCarthy (1980), and above all Acemoglu et al (2001), comment that, "There is almost complete agreement that Botswana achieved this spectacular growth performance because it managed to adopt good policies" (Acemoglu et al (2001:1).

While our interest does not lie so much in the type and dynamic of what our commentators refer to as "orthodox economic principles," we are, however, much more interested in, and underscore, the fact that, overall, the installation of pro-poor structural policies favor the blossoming of the agriculture sector in any country and more so in Nigeria and SSA for the many reasons we have severally adduced as are rooted in the nature of the region. What we argue in favor of here instead is that revolution in agricultural and general economic development is a matter of making an inward look to model and structure the development plan of Nigeria in such a way that reflects its peculiar conditions. This was Botswana's step and remains a great example. Unlike those of Nigeria and many other leaders of SSA, the political leaders Botswana realized that, "[…] there is always a trade-off in the benefits of economic policies, requiring that economic realities dictate policy priorities. Indeed, this is the essence of evidence-based policy formulation and advocacy (Adedipe, 2014:1).

Our study findings strongly suggest that Nigerian leaders of the past and present tenures—military regimes and democratic administrations alike—have unfailingly failed to follow the lead of the social, economic and other conditions of the country in setting policy priorities especially in relation to the agriculture sector. This is why agricultural development in Nigeria has been a caricature as the progressive developmental stages of this study illustrate. This is one central point of conclusion the rich responses of our study participants and evidence from direct observation unfailingly establish in the effort to track answers to the study questions. And if we must be

consistent with the voice of field data as are supplied by real farmers, our response could not be otherwise. As such the core point of our argument and proposal is that, for agricultural development to become what it should be—an industry of the people, for the people and by the people—the farmers themselves—policies that affect it must reflect the real experiences of farmers rooted in their immediate environment. If the agriculture sector must return to its role as the greatest employer of the people; if it must regain its place as the highest contributor to the nation's GDP; if it must be the source of adequate production primarily for domestic food supply and secondarily for export and foreign exchange purposes; if the sector must close out the food security gap ravaging the populations of the nation and so cut off the rope of excessive and unnecessary importation of food with its corresponding high costs, then, the nation's development policy formulation and implementation must be pro-poor and pro-agriculture in character and so reflect these realities as they are. We shall return to this point later; we must bear it in mind as we go on.

Unfortunately, this policy-related point is what Nigeria and other SSA countries failed to do at independence, and have not inched close to doing even unto date. For example, within the first two decades following their independence, most SSA countries abandoned the pursuit of agricultural development and focused on industrialization, which Ake (1996:8) has described as a quest for "catching up with the West." We, however, prefer to describe this primordial derailment as the pursuit and mimicry of a world picture entrenched in the totalizing ideology in which development is conceived, planned and executed as a *project* rather than as a *process*. But by so doing they lost the advantages of a true economic revolution which, at that time in the history of the nations of SSA, could not have come from outside the milieu of agriculture that was already the highest contributor to their GDP, the highest creator of employment, a major (if not the highest) contributor to their foreign exchange earnings and, very importantly, the provider of the very

products that are highly needed by the industrial sector. With this fixation on industrialization, there followed the twisting and thwarting of policies to favor their industrialization priority.

Consequently, this choice, we saw, occasioned the dolling out of substantial investment resources in favor of the industrial sector and to the crass detriment of the agriculture sector. This lopsided inclination towards industrialization turned out not to be so much for the sake of the common good as it was to make it easy for the allocation of easy-to-grab resources (development funds) by the same corrupt political elite. Along the same line, this bore the anticipated political struggle for the control of economic power. In the face of this often violent dual struggle, the abandonment of agricultural development was the obvious consequence. Thus brutal conflicts and wars ensued in Nigeria as in other SSA countries and have continued to date. And in the face of such brutalities pro-poor and pro-agricultural development was totally forgotten as no nation prospers politically and economically in the face of political instability.

As study results indicate, when programs in the name of agricultural development were floated at all, it was only for the creation of many more opportunities for easy looting of public funds. That was why, in the case of Nigeria, for example, the one and only pro-poor because pro-agricultural development program that was established, namely, the Directorate of Foods, Roads and Rural Infrastructure (DFRRI) also failed. Though DFRRI was charged with the comprehensive responsibility of improving rural agricultural production including the promotion of agriculture, improvement of rural infrastructure (roads, water supply, electricity, and transportation), encouraging food production through the provision of improved farming inputs and techniques, updated implements, and extension services, it too failed because it did not serve the interest of the corrupt political class.

When these cases of failed steps towards agricultural development in Nigeria as in many other parts of SSA are placed against the landscape of Botswana's successful experience, it becomes clearer and more evident that economic development success lies in choosing and implementing economic policies that focus on the common good especially of the rural poor. As the account of Acemoglu et al (2001:4) continue,

> There is almost complete consensus that Botswana achieved growth because it managed to adopt good policies. The diamonds no doubt helped in the rapid growth. Yet, *it is striking that, contrary to other African countries with abundant natural resources such as Angola, Zaire (Congo), Sierra Leone or Nigeria, there were no civil wars or intense infighting to control the revenues from diamonds in Botswana* (emphasis ours).

15.2.2. *Asian Green Revolution[82]: The Impact of Pro-Poor Public Intervention Policies*

Turning a little away from Africa and to another part of the globe if for the purpose of widening the scope of our argument, we cite and appeal to the case of the Asian Green Revolution. In so doing we intend to show how the role of the public sector could reflect good and pro-poor policy choices. For, rather than abandon the private sector, that is, Asian farming households, to the daunting challenges of meeting the demands of food security and poverty reduction, the Asian countries created and implemented a strategy that has gained the Green Revolution coinage.

> While the term "Green Revolution" originally described developments for rice and wheat, the term has since referred to the development of high yielding varieties for a number of other major food crops important to developing countries. These include sorghum, millet, maize, cassava, and beans. Moreover, there is now a full-fledged system of international agricultural research centers, the Consultative Group on International Agricultural Research, that work on many aspects of developing country agriculture (Hazell, 2009:1).

82 According to Pinstrup-Anderson and Hazell (1985:1), The Green Revolution is a "term used for rapid increases in wheat and rice yields in developing countries brought about by improved varieties combined with expanded use of fertilizer and other chemical inputs." However, it is the case that, over time, the Green Revolution went beyond the cases of rice and wheat and expanded the range of crops that are also produced as massively as are rice and wheat.

Historically, the term and phenomenon of the "Green Revolution" that it represents was a child of circumstance, that is, of the situation of dire food insecurity experienced in the Asian countries where the colonial powers invested little in food production and agricultural research. At independence, the populations of the new Asian nation-states grew at historically high rates and, by the mid-1960s, hunger and malnutrition were widespread resulting in high dependence on food aid from rich countries. With the occurrence of the back-to-back drought recorded in India during the mid-1960s, the already precarious situation got worse.

> In response, the Rockefeller and Ford Foundations took the lead in establishing an international agricultural research system to help transfer and adapt scientific advances to the conditions in developing countries. The first investments were in research on rice and wheat, two of the most important food crops for developing countries. The breeding of improved varieties, combined with the expanded use of fertilizers, other chemical inputs, and irrigation, led to dramatic yield increases in Asia and Latin America, beginning in the late 1960s (IFPRI, 2002:1).

In 1968, the United State Agency for International Development (USAID) Administrator William S. Gaud coined the term "Green Revolution" to describe this phenomenal growth in agriculture.

As a matter of fact, the Green Revolution was a continuing process of change rather than a single event. Even today, it has continued to evolve and grow as a process of change in agriculture leading to high levels of productivity in essential staple foods in the Asian and other developing countries that have embraced it.

The Asian Green Revolution is a state-driven, market-mediated, and small-farmer centered strategy the aim of which is to increase national self-sufficiency in food grains (Sida, 2006). For, unlike what still obtains in Nigeria and across SSA, where smallholder farmers are abandoned to the throes and woes of the absence of requisite provisions to undertake agricultural production, the governments of Asian countries did the opposite. According to Diao et al (2007:18),

> At that time, Asian governments set out to stimulate food production by providing most key services themselves, including investments in irrigation and transport infrastructure, research and extension services, marketing chains for the supply of improved seeds and fertilizer, and credit provision. The governments often intervened to stabilize prices for producers and consu-

> mers alike, and provided subsidies for many key inputs to encourage their uptake. These governments assumed a leading role in agricultural development and went far beyond a facilitating role.

In pointing out the rationale behind the introduction of the Green Revolution model, we argue with Diao et al (2007) that it was hinged on the inability of the private sector to provide by self all it takes to respond effectively to market situations. As such, the need arose for the public sector intervention: "[…] no Asian country developed its food staple agriculture from a subsistence to market orientation without public intervention in the market chains" (Diao et al, 2007:18). That intervention, according to Pinstrup-Anderson and Hazell (1985:1), has produced

> […] a dramatic impact on incomes and food supplies in many developing countries. However, the impact goes beyond these immediate and very important results. The Green Revolution has facilitated institutional and social changes in rural areas and provided opportunities for self-sustaining economic growth and reduced poverty.

It should be factored in here that the Asian Green Revolution was not an *ad experimentum* nor an *ad hoc* sporadic response in which trial by error is the *modus operandi*. Instead, its driving and sustaining rationale no less the tremendous breakthroughs it has led to across the countries of the Asian region readily illustrate that it was a well-thought out and implemented public policy-driven process of agricultural development with poverty reduction as its main target. It is not surprising that many studies have found a wide spectrum of its many dividends in poverty reduction. For example, Hazell (2009), Rosegrant and Hazell (2000), Hazell and Haddad (2001), Lipton and Longhurst (1989), Thirtle, Lin, and Piesse (2003), Ravallion and Datt (1996), Fan, Hazell and Thorat (1999), Sen, Mujeri and Shahabuddin (2004), Bonschab and Klump (2004), Pinstrup-Anderson and Hazell (1985) among many others overwhelmingly document that the Asian Green Revolution bore and still bears both short and long run fruits including but not limited to increased agricultural productivity, significant poverty reduction among poor farming households, meaningful appreciation in the prices of agricultural goods, creation of more on-farm

and off-farm agricultural production employment opportunities in which higher wages were also recorded. More remarkable among these changes is the fact that, "For Asia, these poverty elasticities are still higher for agriculture than for other sectors of the economy (World Bank, 2007; Hasan and Quibria, 2004). Similarly, the Asian countries' public sector has been experiencing returns to the different types of investments it undertook to stimulate the energies of the Green Revolution initiatives (Fan, Gulati and Thorat, 2008). The foregoing makes for underscoring again, how the agriculture sector portends to the realization of the Millennium Development Goals (MDGs, 2000) the achievement of which has greatly eluded Nigeria and the SSA region (USAID, 1997; Millennium Project, 2005; World Bank, 2002).

To round off this section, it is very important to stress again, that the Green Revolution initiative is the product of good and effective policy choices of the Asian countries. The Asian case is unlike the case of Nigeria and other SSA countries where, as our study findings strongly suggest, paper publications and deceptive political rhetoric are all that farmers get in the name of investment in agricultural development. And where there are agricultural development programs and initiatives at all, as we chronicled in the case of Nigeria, for example, they are usually choked by the social weeds of corruption and lack of accountability and transparency among the ruling class in addition to being planned and executed in the quick-fix method of a project which makes it easy for the funds to be looted by the same corrupt elite. In the case of the Asian countries,

> The Green Revolution was more than a technology fix. It also required a supporting economic and policy environment. The need to educate farmers about the new technology, rapidly expand input delivery and credit systems so they could adopt the new inputs, and increase processing, storage, trade and marketing capacities to handle the surge in production, was considered too large a challenge for the private sector on its own at the time, especially if small farmers were to participate […] It was also necessary to ensure that adoption of the technology package was profitable for farmers. To achieve these ends, governments across Asia actively intervened in launching and implementing the Green Revolution (Hazell (2009:5).

Political goodwill, which is the only genuine and effective machinery of economic evolution and revolution in any country and at any point in history, is what we observe as the dynamic "force" galvanizing the wheels of the Asian Green Revolution. For, in each of the Asian nation-states that embraced this initiative, the political goodwill, the overall economic development and more so the agricultural development foresight driving the political leaders are seen reflected in pro-poor choices they made especially reflecting the post-independence peculiar conditions of their countries. Again, unlike the case of post-independence SSA nations which failed to prioritize agriculture, we note that,

> Immediately after independence, the Government of India placed a top priority on agricultural development. Prime Minister Jawaharlal Nehru realized the importance of physical and scientific infrastructure for modern agriculture. During the First Plan (1947-1952), the government allocated about 30 percent of its budget to agriculture and irrigation, and this led to an impressive build up of rural roads, irrigation, rural power, state agricultural universities, and the national agricultural research systems. Fertilizer plants were also set up. Another important policy intervention was land reform. The land reform program began right after independence and continued into the early 1960s. It was characterized by several distinguishing features: the abolition of intermediaries such as *zamindars* and *jagirdars*, reforms to provide tenancy security, ceilings on the size of landholdings, and use of cooperatives and community development programs (Hazell, 2009:6).

The Green Revolution initiative has also attracted some valid criticisms that are sometimes overstretched. Among the criticisms held against it include, that it has occasioned or worsened environmental degradation, increased income inequality, enhanced inequitable asset distribution, worsened absolute poverty, and that it encourages unnecessary mechanization thereby pushing down rural wages and employment. Flipped over to the other side of the discourse, the Green Revolution finds its sustaining strength in the fact that its many short and long run benefits through which it very significantly approximates the MDGs outweigh its side effects. In addition, the reasons for which it has been criticized have been addressed with the result that those side effects have been reduced through the introduction of more pest-and-weed resistant crop varieties and more environment-friendly equipment (IFPRI, 2002:3). These points give us hope that if it is

operationalized in SSA in ways that reflect the sociopolitical, economic, ecological, cultural and institutional conditions of the region, it will hasten the region to the MDGs targets.

15.3. *Conclusion: The Path to Appropriate Agricultural Development in Context*

In our overall introduction to this work we made a binding commitment to the effect that we would show how the reversal of the same policy instruments that were turned against agriculture is the way forward toward bringing back the sector to its proper place in the whole gamut of economic performance in SSA. We have paved the way for this and, indeed, we have taken the first bold steps towards fulfilling our research mission on that by briefly putting the overall and especially agricultural success stories of Botswana and the Asia countries to the center of this appraising discourse. In this third and final part of this chapter, we stand now to make the case of our proposal. However, rather than couch our proposal on grand theoretical platitudes often filled with disjunctions that strike incongruous and discordant notes between real conditions and one-plan-fit-all characteristic of the development ideology, our proposal is founded on the rich data from our ethnographic research, which is our unique strength as an anthropologist.

We propose that agricultural development in Nigeria and SSA at large should be carried out as a *process in context* and not as a *project*. We will examine the latter first, which is doing agricultural development as a project in order to contrast it with the first, doing it as a process.

15.3.1 *Agricultural Development as a Project*

When, and where, agricultural "development" is approached as a *project* it often ends up in the style of grand theoretical tropes; in themselves such dispositions assume an interventionist, philanthropist posture. Like every other intervention, development approached as a project usually strikes violence to the nature of what is intervened in, that is, by imposing something strange without first understanding the complex conditions of the milieu where the intervention of the

project is being applied. Agricultural development executed in the spirit of a project usually assumes the arrogant, triumphalist insensitivity of the donor of a "development" project. The developer, who, by the same logic, strikes a dissonance between himself, the development project itself and those in whose milieu and for whom the project is being cited. But because development clad in such gab does not pay regard to the conditions of the present it also easily forgets that it has a history the failure or success of which needed to be appraised before more of it is carried to the fore of the present. And when it fails again, it hardly takes a backward step to find out why it did fail so as to find out how best to proceed in the future; instead, it continues to launch yet more projects conceived and carried out in the same ideology of project as we saw in the Nigerian case. We make bold to state here that post-independence governments of SSA allowed themselves to be drawn into this ideology of development as a project. Unfortunately, many of them are still ditched in it but only because they have refused to learn the lesson of carrying out agricultural development as a project. Instances abound; but before that, let us tap a little bit into the nature of the development ideology in which is rooted the doing of agricultural development in SSA as a project.

In its historical underpinnings, the development ideology is a child of circumstance hatched out in Bretton Woods in the United States of America as the Marshall Plan of July 1944 at the meeting of over 700 international delegates. It was a meeting held to establish "[…] a framework for a global system of financial and monetary management" (Moyo, 2009:10). It was also conceived as a framework to inject massive funds to fix some European economies that were fractured during World War 11. The World Bank (WB), the International Monetary Fund (IMF), and the International Trade Organization (ITO) were to lead its course (Moyo, 2009:11). However, the emergence of development theory in the 1950s came to deal with a far narrower problem, namely, "[…] how the economies of the colonies of Britain, France, Portugal and other European

powers […] might be transformed and made more productive as decolonization approached" (Leys, 1996). As Moyo's (2009:10) conclusion goes, "It was from this gathering [of Bretton Woods] that the dominant framework of aid-infused development would emerge." This framework was extended to Africa on the assumption that, "[…] if aid worked in Europe, if it gave to Europe what Europe needed, why couldn't it do the same everywhere else" [and] attention turned towards other parts of the world, and specifically, in the context of aid, Africa" (Moyo, 2009:13).

It was in this way and in this historical context that Africa became the experimental ground of a said "First World" of the West that presents itself as the model vested with the totalizing schemes and armory and expertise of development technocracy to bring her (Africa) to the appointed teleological omega-point of modernity as a basic characteristic of development. Accordingly, development is presented "[…] as a natural unfolding of universal social process, which human agents could facilitate but which was driven by history" (Cooper, 1997:1). Some of the discontents of the ideology of development that informs and sustains this posture towards Africa is that it fails to define development simultaneously with underdevelopment in order to face the questions as to who underdeveloped Africa (Rodney, 1973) on the one hand, and the "development of underdevelopment" in light of the political economy of global inequality (Seligson and Smith, 2008), on the other.

It is also very true that on the part of post-independence Sub-Saharan African leaders, development, especially in the framework of their approach to it—as a mimicry of the West—was seen as the panacea and creed of universal uniformity (or conformity?). As such they fell prey to the world picture in which African communities were viewed from the lens of biological, evolutionary framework (Moore, 1994:8) and thus represented as "savage," "rural," "primitive," "uncivilized," "simple," "traditional," "backward" and "undeveloped" as against the "advanced,"

"complex," "civilized," "urban," "modern," "industrialized," "progressive," and "developed" Western countries. It is within this landscape of an imaginary prototype of a developed and modern First World of the West that leaders of SSA were fascinated into embracing development as a project to be executed and become industrialized like the West. As it is, this goes to show "[…] how certain representations become dominant and shape indelibly the ways in which reality is imagined and acted upon" (Escobar, 1995:5).

It should not be forgotten that part of this is the discourse of the politics of power which, as Wolf (1982:6-7) argues, ends in the creation of non-existent fixities: "East is East, and West and West," a political agenda which also makes for the partitioning of an interconnected whole into a "Third world of underdevelopment," the world of the East (a disease of modernization") and, of course, "the 'modern world of the West"—the ideal and model of modernity or development, the prototype of life, liberty and happiness which the underdeveloped Third World must set itself afoot to approximate by appropriating.

The irony of it all is that this was how Nigeria and SSA got ditched in dependent development with a plethora of its correlated bottlenecks including corruption done through easy looting of *development* funds, the development of the sticky plaque of reliance on foreign aid for local development (aid-dependency), and heavy aid-related debts among others. Unfortunately, from the 1970s down the road of this era of aid-dependency, it was recorded that more than US$30 billion flowed into Africa. Surprisingly, however, from 1970 through to 1980, "when aid flows into Africa were at their peak, the poverty rate in Africa actually rose from 11 per cent to a staggering 66 per cent" (Moyo, 2009: x).

The history of the development ideology, especially in its application to (Sub-Saharan) Africa is more nuanced and layered than we have represented here; this much suffices for our

purposes. In sum, our take-away point here is that development operationalized as we rehashed here was conceived and executed as a project—because it started as a project in the first place.

The point of this historical connection is to draw our attention to the fact that political leaders of post-independence Nigeria and SSA had this mindset of agricultural and all development as being a project: they embraced it as project, planned it as a project, and logically implemented it as a project, and have continued with it as a project. Thus disposed, African leaders saw development as industrialization, which yields only one syllogistic reasoning: the kind of problem one defines, and how he defines it for himself determine the kind approach he crafts and follows; African leaders conceived development as a project pursued as industrialization; therefore, they created and followed a pattern and the kind of policies that they deemed fit and favorable to the realization of their industrialization agenda.

One major consequence of this choice and legacy of pursuing development as a project was its logical but avoidable failure. The failure in pursuing development as a project itself came from the fundamental lack of the requisite knowledge or understanding of what it takes to industrialize. In pursuing industrialization, that is, development conceived as a project, SSA leaders chose policies that were misplacement of priorities: choosing industrialization—which is secondary—over and above agricultural development—which is fundamentally primary. Accordingly, development policies and the allocations of investment funds tilted in favor of industrialization thought to be more resource yielding; the agriculture sector was neglected. Overall, the major reason for the failure in the development paradigm followed by leaders of SSA is that they failed to treat development as something that is situated or situational and therefore can only be understood within the historical, economic, sociopolitical, cultural, institutional and other conditions peculiar to the very environment where it is done.

The indices of failure chronicled in the case of Nigeria's agricultural development (chapter 13), for example, tell the tale of our point and underscore how agricultural development *functions* when it is approached as a project. We recall again the snapshots of Nigeria's chequeered genealogy of development which, to a large extent mirrors what obtains in other parts of SSA. Phase 1 (162-1968): mono-cropping for cash export produce modeled after colonial extractive economic policy;

Phase 2 (1970-1974): the era of National Development Plan (NDP);

Phase 3 (1975-1980): the era of large scale, capital intensive projects including River Basin Development Authorities (RBDAs), National Accelerated Food Production Program (NAFPP), and Agricultural Development Projects (ADPs), Operation Feed the Nation (OFN), Structural Adjustment Program (SAP);

Phase 4 (1980-1988 and beyond): the era of Directorate of Foods, Roads and Rural Infrastructure (DFRRI) with its emphasis on rural infrastructure installation for agricultural development; and a host of others.

Let us recall again, as we had earlier argued, that the main feature of (agricultural) development viewed and implemented as a project is a streak of failures. In his extensive study of development projects in Lesotho Ferguson (1994) found that an official report (FAO, 1977) chronicled over 200 rural development schemes in the country of Lesotho alone; nine of these were large, expensive area-based projects focusing on agricultural development. Astonishingly though, his field observation ended in the documentation of how these development projects ended in crass failure. As Ferguson (1994:8) observes, "[…] if all observers of Lesotho's "development" agree on one thing, it is that "the history of development projects in Lesotho is one of almost unremitting failure to achieve their objectives" (citing Murray, 1981:19). Ferguson (1994) found

it to be a pattern across Africa—that because development was viewed in this lens of being projects they continually failed. As such his conclusion is that,

> Again and again development projects in Lesotho are launched, and again and again they fail; but no matter how many times this happens there always seems to be someone ready to try again with yet another project. For the development industry in Lesotho, "failure" appears to be the norm […] "Rural development" projects are to be found scattered liberally across the African continent and beyond; and, in nearly every case, these projects seem on inspection to be planned, implemented, and justified in nearly the same way as they are in Lesotho. What is more, these projects seem to "fail" with almost the same astonishing regularity that they do in Lesotho.

Williams (1981:17) strongly corroborates this field observation: "By any criteria, successful projects [in Africa] have been an exception rather than the rule."

Observing that agricultural development across (Sub-Saharan) Africa began in the spirit of a project and has become a legacy that is still followed to a great extent—a reason it has consistently failed—we are now left with attempting the question as to how else Nigeria and SSA could do agricultural development that, all things being equal, would guarantee success. This is our next (and last) step in this research endeavor.

15.3.2. *Agricultural Development as a Process in Context*

One of the most outstanding conclusions suggested by our field data and overwhelmingly corroborated by the many dozen sources consulted in this study is, as Timmer (2005:1) puts it,

> No country has been able to sustain a rapid transition out of poverty without raising productivity in its agricultural sector […] The most important reason is new understanding that economic growth is the main vehicle for reducing poverty and the growth in the agricultural sector plays a major role in that overall growth as well as in connecting the poor to growth.

This is exactly the same point that USAID (1997: v) stresses when, while lamenting that "[…] Sub-Saharan Africa has not enjoyed the economic and social progress occurring in other parts of the world," strongly adds a however instructive and challenging reminder that, "Indeed, agriculture must be the engine for economic and social progress." While this last point is common knowledge traded in all that goes in the name of agricultural development, we, however, state that for this to

be successfully done and so restore agriculture to its original place in the overall economy of Nigeria, agriculture must be conceived, planned and executed as a *process in context*. This is the cap this dissertation wears as its overall proposal and the most central pillar-point of its contribution to the on-going interdisciplinary engagement in the search for how to handle the agricultural crisis facing Nigeria in particular and SSA in general. It is a process of refocusing and revitalizing the agriculture sector of the area.

The ideological insight which informs our stance on doing agricultural development as a process in context, and not a project, takes its rise from three closely knit linkages as were suggested by Ake (1996:125) and which we hereby adopt. They include that,

1) Development is a process by which people create and recreate themselves and their life circumstances to realize higher levels of civilization in accordance with their own choices and values;

2) Development is something that people must do for themselves, although it can be facilitated by the help of others; and

3) Africa and the global environment are to be taken as they are and not as they ought to be.

Whereas these theoretical assumptions are also "[…] largely the prevailing conventional wisdom of the development community" Ake (1996:125) on the one hand, and while Ake sees the feasibility of development in SSA almost exclusively from the perspective of democracy on the other since, according to him, "[…] African countries can develop only in the context of democratic politics" (Ake, 1996:126), we see and adopt this development posture from the perspective of the insights and conclusions informed by our field data but not neglecting the merit there is to Ake's ideological stance.

For, putting our study findings and the conclusions based upon them in view, we argue that real development, at least from its rural community development perspective, lies in the hands of the same farming households who engineer the prospects of agricultural production in Nigeria. This argument stands on four legs each of which we represent here. They include:

- First, farmers of Nigeria produce greater part of the food and other agricultural needs of the region.
- Second, rural community development which, in this context we prefer to render as agricultural development and vice versa, can occur and occur sustainably if, and only if, Nigerian rural faming households have what it takes to meet the challenges of the region's food need.
- Third, so far the fact is that, while Nigerian farming households are at the center and struggle singlehandedly in the business of agricultural production, they, however, cannot pull off what it takes to effectively meet the demands of agricultural production in the region.
- Fourth, given the foregoing three points, Nigerian farmers need the sustained support of the public sector, which we found has been lacking.

To explain what we mean by the "context" component of this ideological position on doing agricultural development as a process, we very briefly recapitulate the 12 points with which we advanced our feet into this chapter all of which are informed by our study findings. They include:

1) Nigerian farmers' continued use of old and unimproved farming technologies and systems;
2) Farmers' inability to adopt improved ways of food production due to poverty and lack of capital;
3) Lack of public sector assistance in the areas of capital, credit facilities and other farm inputs;
4) Gridlock-like tenures of land rights and holdings and the limits they impose on farmers;

5) Exclusion of women from land rights though they contribute more to agricultural production;

6) Ever-growing population in the face of ever-shrinking cropland size;

7) Incessant conflicts almost always land-related with no effective conflict management toolkit;

8) Migration especially of young adults for various reasons especially conflict-related stressors;

9) Inhibitions imposed by early marriage and low level of education;

10) Farm labor shortages for various reasons including diseases, high mortalities and malnutrition;

11) Lack of good and functioning infrastructure especially road and or transport networks; and

12) All these because of the adoption of policies unfavorable to the agriculture sector.

From these 12 points one easily sees that Nigerian and SSA farmers are circumstantially at the center of agricultural development and, ipso facto, of rural community development in the region. They are at the center of agricultural development when we consider their immense contribution to both food chain supply and the GDP of the nation. Much more critically, they are also at the center of the politics of neglect and exclusion by a public sector that fails to provide requisite assistance of capital and related farm inputs which farmers need to do better what they are already doing. They are also at the center of the assaults of poverty, low socioeconomics, and general economic backwardness. From all perspectives, therefore, there is need to focus development policy on the rural poor of Nigeria and SSA.

Against this three-fold background, let us recall that out of the well over 6 billion world population 52 percent reside in rural areas; rural poverty accounts for nearly 63 percent of poverty worldwide, which reaches between 65 and 90 percent in some countries of Sub-Saharan Africa (United Nations, 2004; Khan, 2001; and Anyanwu, 2005). Furthermore, of the estimated 1.2 billion people in extreme, absolute poverty the world over, 75 percent of them inhabit rural areas. It is on account of this that Anyanwu (2005:347) concludes,

> The conditions faced by the rural poor—personal consumption, access to healthcare, sanitation, potable water, housing, transport, communications, and education—are worse than those in urban areas […] Thus, *an understanding of rural poverty is precondition for effective pro-poor development strategies* […] The determinants of rural poverty are not only complex but also multidimensional, involving, among other things, gender, age, location, education and occupation. To understand rural poverty and to be able to delineate policy options, we need to study these dimensions (emphasis, mine).

As to why the rural poor gain more focus, African Development Report (2002:17) proffers some six additional reasons all of which strike deep into our stand defined by our study findings. They include: 1) poverty is growing in Africa compared to other regions; 2) about 70 percent of Africans live in rural areas; 3) poverty in rural areas is not only widespread but it is also deep and severe; 4) overwhelming numbers of the rural poor are vulnerable to external shocks, natural disasters, conflicts, and the spread of diseases including HIV/AIDS; 5) new initiatives bring the rural poor to the center of the development dialogue; and 6) few countries will be able to meet the agreed International Development Goals, particularly in the rural areas.

The main thrust of this argument through which we substantiate and buttress our proposal—of doing agricultural development as process in context shares commonality with Ake's tripartite argument rooted in his stand that it is only in the climate of democracy can development take place. We argue with him that people are the end of development, and as such must be its agents and its means.

> […] people cannot be the end of development unless they are already its agents and its means, a condition that has never been true in Africa […] if people are the end of development, then their well-being is the supreme law of development. But the well-being of the people will only be the supreme law of development if they have some decisionmaking power (Ake, 1996:126-7)

The (seeming) ideological difference between the stance of Ake and ours' in terms of where the emphasis for a pro-poor development strategy lies notwithstanding, we find that there is even a deeper and stronger area where his democracy-driven argument and our ethnographic data

informed argument fall into harmonious embrace. This ground of commonality lies in the following lines, which largely sweep together all the essential points we have thus far stressed.

> If the people are the agents, the means and the end of development, then development has to be constructed initially as rural development generally and more specifically as agricultural development. More than 70 percent of the peoples of Africa are rural dwellers who get their livelihood from agricultural activity. It is in agricultural activity that they can immediately participate in economic development; it is the sphere in which they have the skill and experience to offer and in which they can most profit by enhancement […] what is needed is a strategy that encourages farmers to do what they are doing better, to be more efficient and more productive, a strategy that is conducive to the realization of those interests that led them to farming in the first place. Encouraging farmers to do better also entails empowering them, making them more skillful, more confident, giving them more access to the things they need to be more efficient (Ake, 1996:142-3; see also Cleaver, 1993:7).

Equipped with all we have put forward in the argument employed to illustrate that the reason agricultural development has fared poorly in Nigeria and many other parts of SSA is that farming households who are at the center of agricultural production are still strangers to being the end, the means and agents of the industry of agricultural production in the region. If one should argue that they are the agents of agricultural development, then, our response is that they are only agents who are left unaided by a public sector that exploits farmers through the mechanism of state apparatus through which it imposes many levies and revenues upon them but fails at the same time to install requisite institutions to boost farmers' productive potential. If another argues that they are already the means of agricultural production in the region, our response lies in what we have said severally and emphatically in the course of this work: Nigerian-SSA farmers are only a means because of the contribution the agriculture sector makes to the overall GDP of their countries; however, they are still strangers to—because excluded from—the decisionmaking process in which policies that affect them are made without involving them. For, in making policy choices that affect agricultural production, farmers are not brought into any participatory role where their insights and indigenous technical knowledge (ITK) could be fielded in to reflect agricultural development strategies rooted in the peculiar conditions of the people and their environments. A

third argument to the effect that farmers are already the end of agricultural development in SSA could not arise because, based on our refutations to the first and second assumed rejoinders, we state that no persons could be the end of a plan or process if they are not first its means and agents.

The conclusion arising from this three-fold piece of reasoning on why SSA farming households are strangers to their own work is that, whatever went and goes in the name of agricultural development has not been pro-poor because it has failed to be farming households centered and so has failed to be pro-poor in nature; as such it has also failed to be community development oriented. It is not community development oriented because it fails to enable farmers to empower themselves with what it takes to develop themselves and hence their environment from within. To sum up, let us compare by characterizing doing agricultural development as a project and as a process as we have tried to represent in the foregoing contrasting arguments.

It is on the strength of the foregoing that we make the following policy recommendations aimed at showing how to engage farming populations in profitable rural agricultural development and hence in rural community development in Nigeria in particular and SSA in general. The policy recommendations we set forth to adduce derive their insights and motif from the data this case study gathered from the many dozen farmers we worked in this project. It is our hope that through them we have attempted the last of the four study questions guiding this study (see chapter 2).

15.4 *Creating the Environment for Agricultural Development: Paradigm Shift*

First, we recommend that governments of SSA should embrace policy instruments to guarantee land security for farming households who are being crowded out by a combination of factors as this and many other studies reveal. This could be done through land tenure and use reforms that reflect the immediate and on-going agricultural production needs of farmers. For, even with requisite labor, capital and its related farm inputs, agricultural production would be mere

wishful thinking without sufficient land especially for landless and land insecure households. Many studies covering the different sections of SSA show that many if not all countries of SSA have already established land tenure and use reforms. A few of such studies include Green (2005), USAID (2009), Republic of Kenya (2014), Mugambwa (2007), Haugerud (1989), Olayiwalo and Adeleye (2006), Atilola (2010) Mabogunje (2000) among others. The problem, however, is that they are not always made effective in order to bring about the purposes for which they were instituted in the first place. Our recommendation is that they should be made functional to facilitate and guarantee sustainable agricultural development in the region. The need for land security for farming households in Nigeria and SSA cannot be overstated.

> Providing security over land is vital if "autonomous" intensification is to occur to meet wealth and investment expectations. Without security of land tenure and land access, individuals have to seek other options to meet their everyday needs (CICRED, 2007:9)

Second, and directly following the above policy stance, we recommend that Nigerian government as with governments of SSA should have functional security apparatus especially within and around farming communities where, as our study found, intra-inter-ethnic and inter-state conflicts usually find their niches among the very farming communities and whose activities are disrupted in the process. Since this is not only very crucially important and directly linked to land occupation and use, neutral instruments of conflict management (prevention and resolution) should be put in place to guarantee security for farmers and promote political stability necessary for the thriving of any economies the world over. To realize this, we recommend that a public-private sector approach be followed since it is often the case that indigenes themselves have their own effective conflict control mechanisms that should be tapped into in conflict management.

Third, and crucially important for effective and sustainable agricultural development, we recommend that governments of SSA should not only install but also maintain effective,

functioning infrastructure of all types and within all tiers of the society especially in rural areas. Taking our bearing from the consensus of our field data, which strongly suggest that lack of good infrastructure is a major reason farmers of the region perform far below their potential, we strongly recommend that this problem be accorded the priority and urgency it requires to set the wheels of agricultural development rolling fast and on the right path. This is more so when we compare Nigeria and other SSA farmers with their counterparts from other global regions where good infrastructure is provided. Additionally, granted that all infrastructure types are necessary for agricultural development, we, however, stress the primacy of place occupied by road and or transport network in attracting not only other infrastructure types but also investments and hence general rural community development.

Fourth, since our study findings indicate that Ukum-Nigerian farmers are left without the advantages of new and improved knowledge for better agricultural practices, we recommend that they be linked to the latest findings of scientific research through the services of agricultural extension agents. This could be done by setting up government sponsored models and outlet farms in all small and easily manageable clusters of communities. So that, with the steady presence of agricultural extension agents, farmers could have ready-at-hand grounds for learning and implementing new farming techniques for increased yields. Here also they could learn of new researches to the same end. We recall that the breakthroughs of the industrial countries in terms of food and nutritional sufficiency was as a result of "[…] massive public investments in modern scientific research for agriculture […]" (IFPRI, 2002:1), and that it was this legacy that was transferred to, and replicated in, the Green Revolution of Asian countries with the historic impacts of steady increase in productivity, continuous drop in the incidence of hunger, poverty reduction, more gainful on-farm and off-farm employment opportunities, and its many other dividends some

of which we chronicled earlier. This same history can be replicated in Nigeria. As in the case of Nigeria, for example, there are both domestic and international agricultural research institutes as well as Federal Universities of Agriculture almost in all States but at least in every region. The problem, however, is that their works do not reflect in farmers' struggles. In Makurdi, the Capital of Benue State where we conducted this study, we recall that there is both a National Research Institute of Agriculture as well as a Federal University of Agriculture in addition to an handful of other institutions of higher learning. Shockingly, all our study participants stated that they do not receive the services of agricultural extension agents whose work ordinarily is to disseminate and bring to farmers the latest innovations in agricultural production. Neither did we meet any such personnel throughout the duration of this case study. For Nigerian farmers to produce at reduced costs, tap into the advantages of global market economy, and improve their socioeconomics, they must be brought into the full circle of improved ways of doing better what they are already doing. The only way to effect this is by linking them to the latest findings from agricultural research institutions, and by extending to them new body of knowledge through well-coordinated works of well-informed agricultural extension agents.

Fifth, to help farmers empower themselves and improve their human and social capital, programs that get to the roots of literacy and school enrollment should be pursued. This is an immediate and direct way of addressing the problems of lack of better appreciation for, and understanding of, improved farming technologies and techniques some of which are too complex for ill-educated and or worse still non-literate farmers. This is in keeping with findings of many studies and as is observed by the African Development Report (2002:25) which, among other things documents,

> A key factor that traps the poor in poverty is the low level of human capital. Although the last 30 years have witnessed impressive progress in human capital development, huge challenges

remain, especially in Sub-Saharan Africa (SSA) with serious human capital deprivation [….]

Sixth, we recommend that government of Nigeria as with other SSA nations should incorporate the wellbeing of women into whatever policy paradigm shifts the region undergoes since, hitherto, women are still seriously marginalized in many parts of the region even in agricultural production where they play major and often greater roles. Engaging in policy adjustments that give women fair and better treatment will not only enhance their capacity to be more economically productive but will above all facilitate the realization of the gender equality component of the United Nations Millennium Development Goals (2000). At least in relation to full and equitable participation in agricultural development, and indeed in all senses of the term, we recommend that governments of SSA should seek and protect the sacredness of women's freedom, which is both the primary end and the principal means of development for all (Sen, 2000: xii, 36).

Whereas we have tried to compress our policy recommendations in the above few points, we, however, do not claim any exhaustive treatment of the public sector paradigm shift Nigeria and other nations of SSA need to make in order to create the requisite fertile and safe environment for the flourishing of the region's agriculture sector. What we have striven to underscore by relying on the lead and strength of our study findings is that, it is by bringing these policy instruments to the center of governance and development strategies can the agriculture sector become the engine for social and economic transformation of Nigeria and the sub-continent. For, when this is done, other things being equal, farmers will have assumed their full place at the center—as the agents, the means and therefore the end of agricultural development. Finally, when this is done, rural agricultural development collapses into and truly becomes rural community development as the source from which farmers can develop themselves, their households, and therefore, their

communities. All talks and programs targeting poverty reduction, ending of hunger, creation of gainful on-farm and off-farm employment especially in rural areas, boosting of the region's GDP, increasing the region's foreign exchange earnings, and a host of other things aimed at bringing about social and economic progress and catching up with the MDGs will remain mere mirage if this pro-poor, appropriate approach to agricultural development is not adopted in Nigeria and SSA.

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APPENDIX

The photo gallery that follows tells the story of how I grappled with agriculture as a lived experience before raising it to the level of science through the lens of Applied Anthropology.

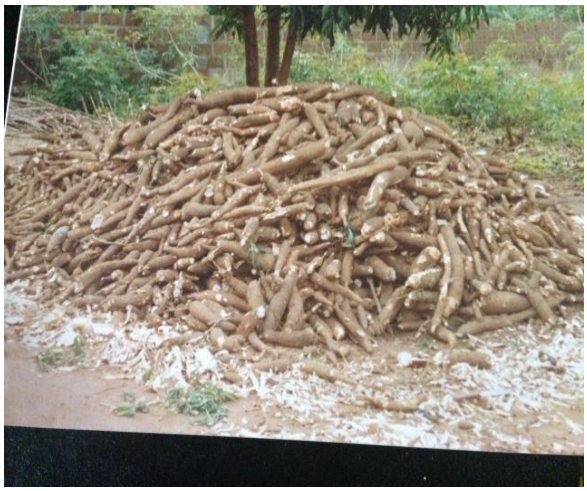

Plate 1: Harvested Cassava Heap

Plate 2: Sample of Special 80-80 Cassava Variety

Plate 3: Jude and Workers Pealing Cassava

Plate 4: Jude and Workers Process Cassava into Floor

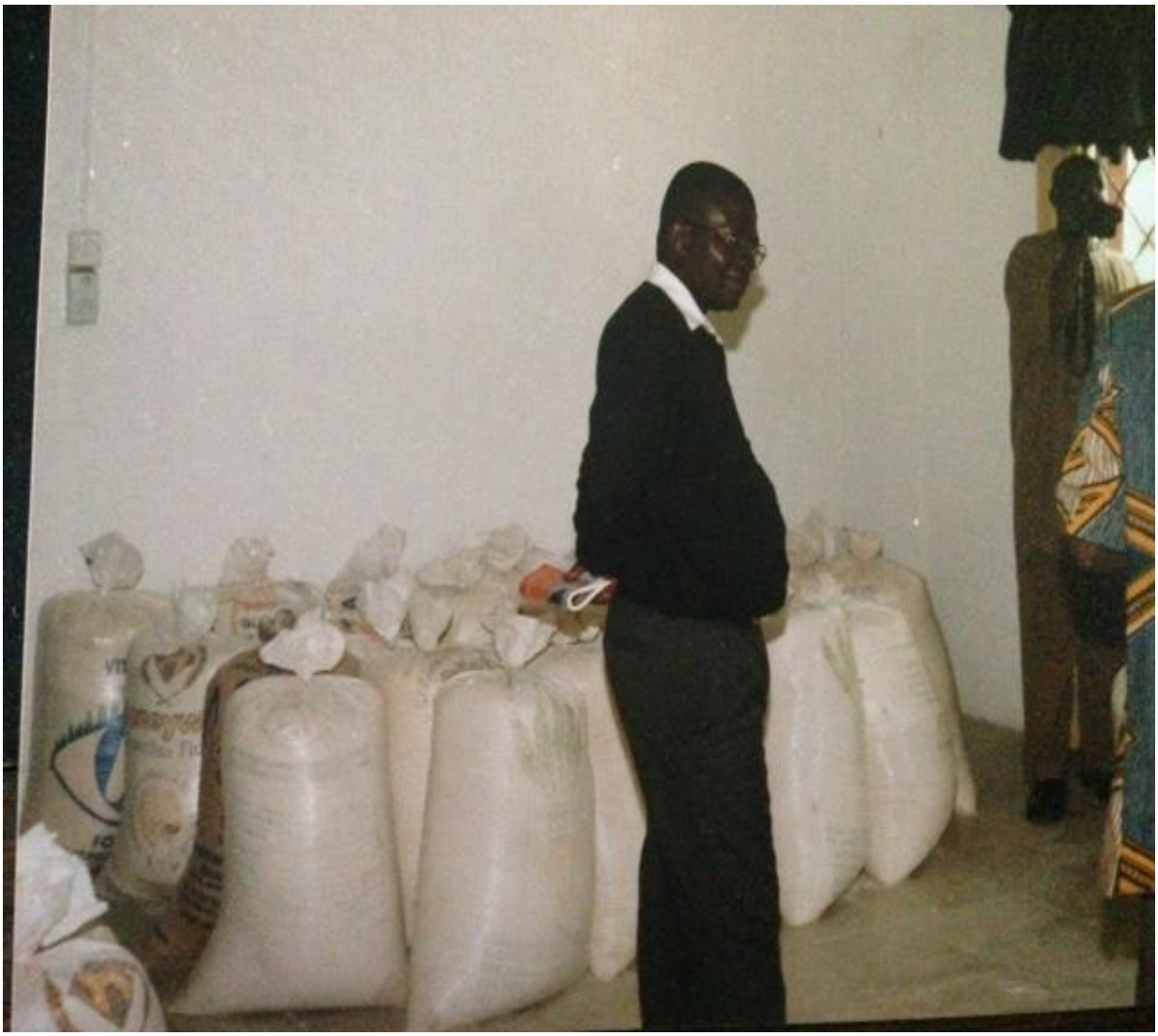

Plate 5: Bags of Cassava Floor in the Store Waiting for Sale in the High Price Season

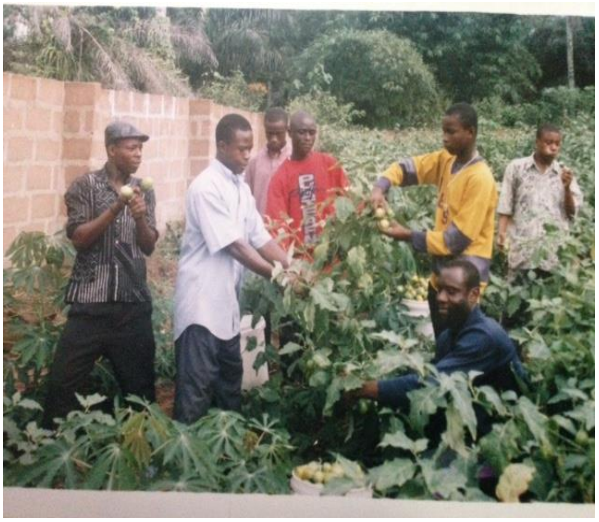

Plate 6: Jude and Workers Harvest Garden Eggs-1.

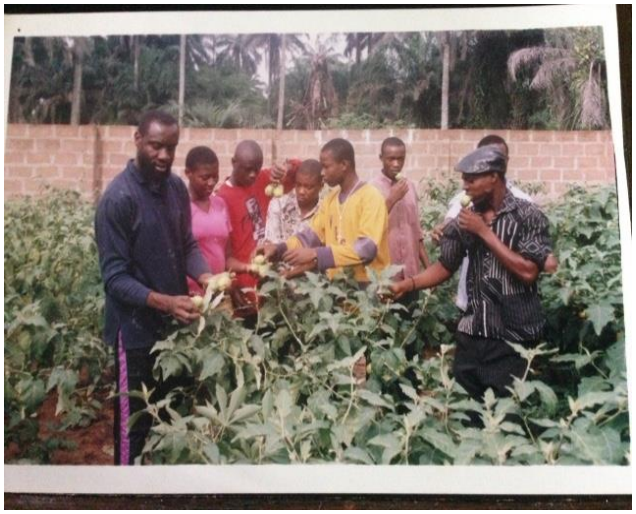

Plate 7: Jude and Workers Harvest Garden Eggs-2

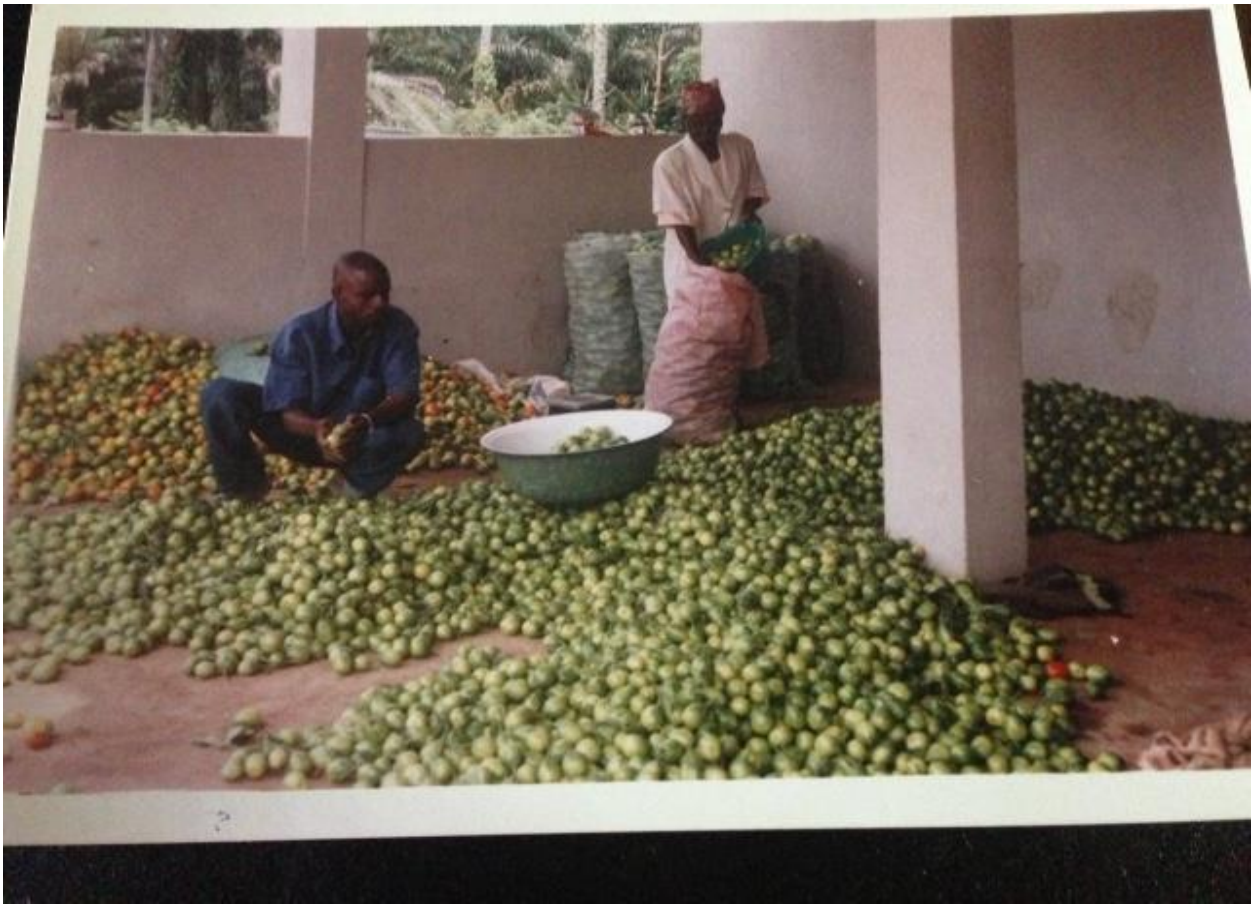

Plate 8: Jude's Workers Busy Bagging Fresh Garden Eggs for Sale in the City and Other Markets

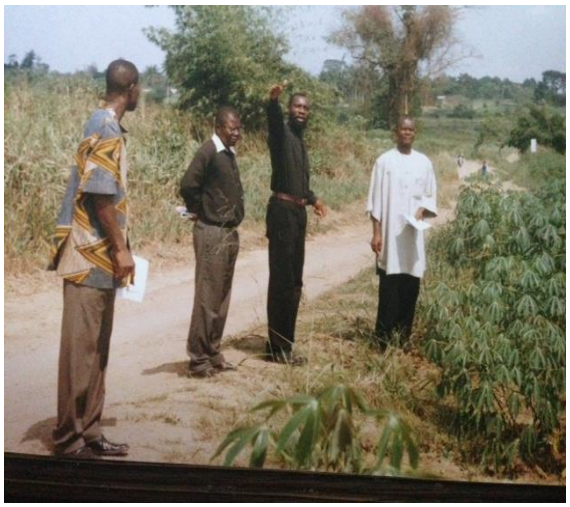

Plate 9: Abia State Ministry of Agric Visits *Ujundu.*

Plate 10: Abia State Ministry of Agric Visits *Ujundu*

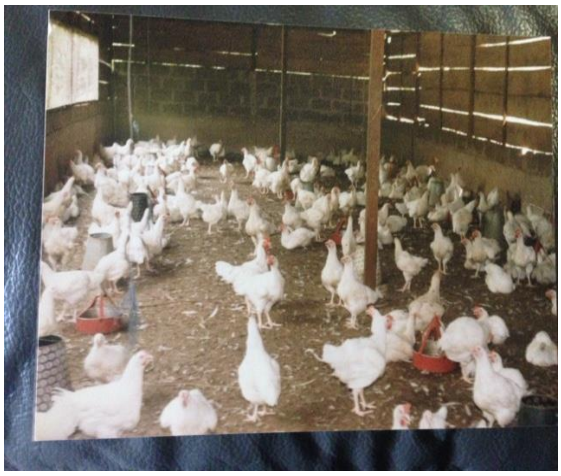

Plate 11: A Cross Section of Our Poulty Farm

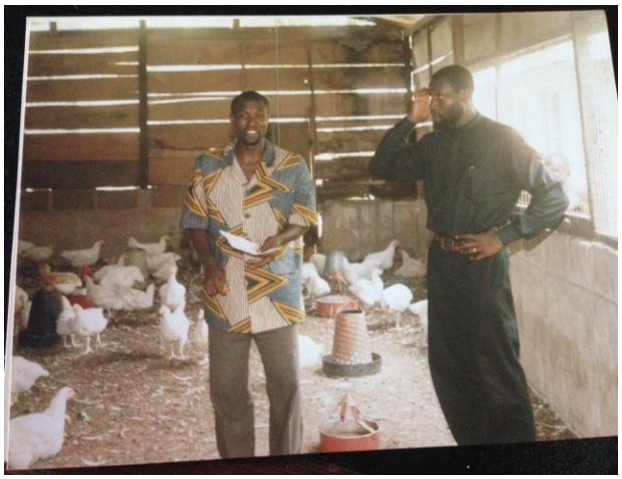

Plate 12: Abia Ministry of Agric Visit Our Poultry

Plate 13: Jude and Dr. Kenneth Nwosu, Director NRCRI, Talk and Share Agriculture-Related Problems

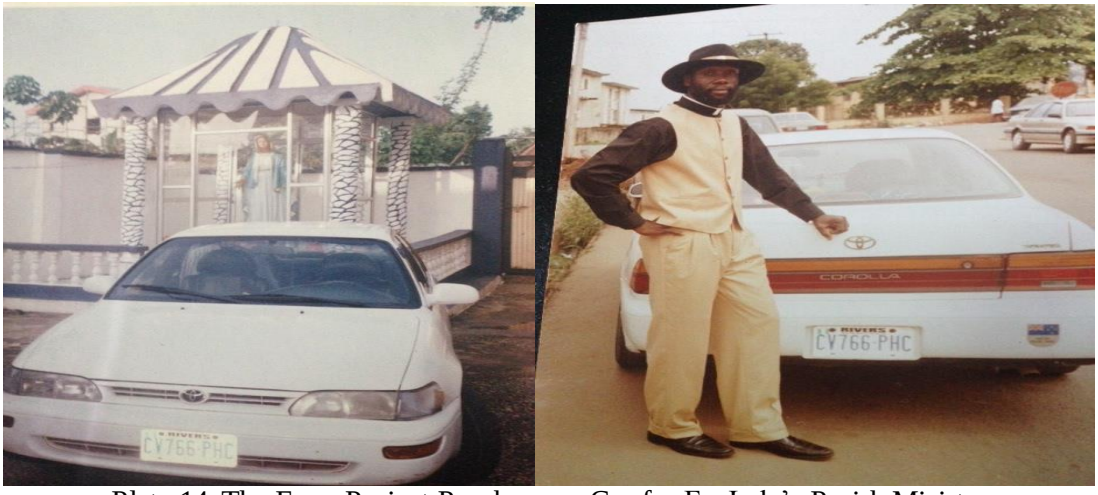

Plate 14: The Farm Project Purchases a Car for Fr. Jude's Parish Ministry

Plate 15: *Ujundu* Farm Project Erects a Rectory for St. Peter's Parish (3 Elevations in View)

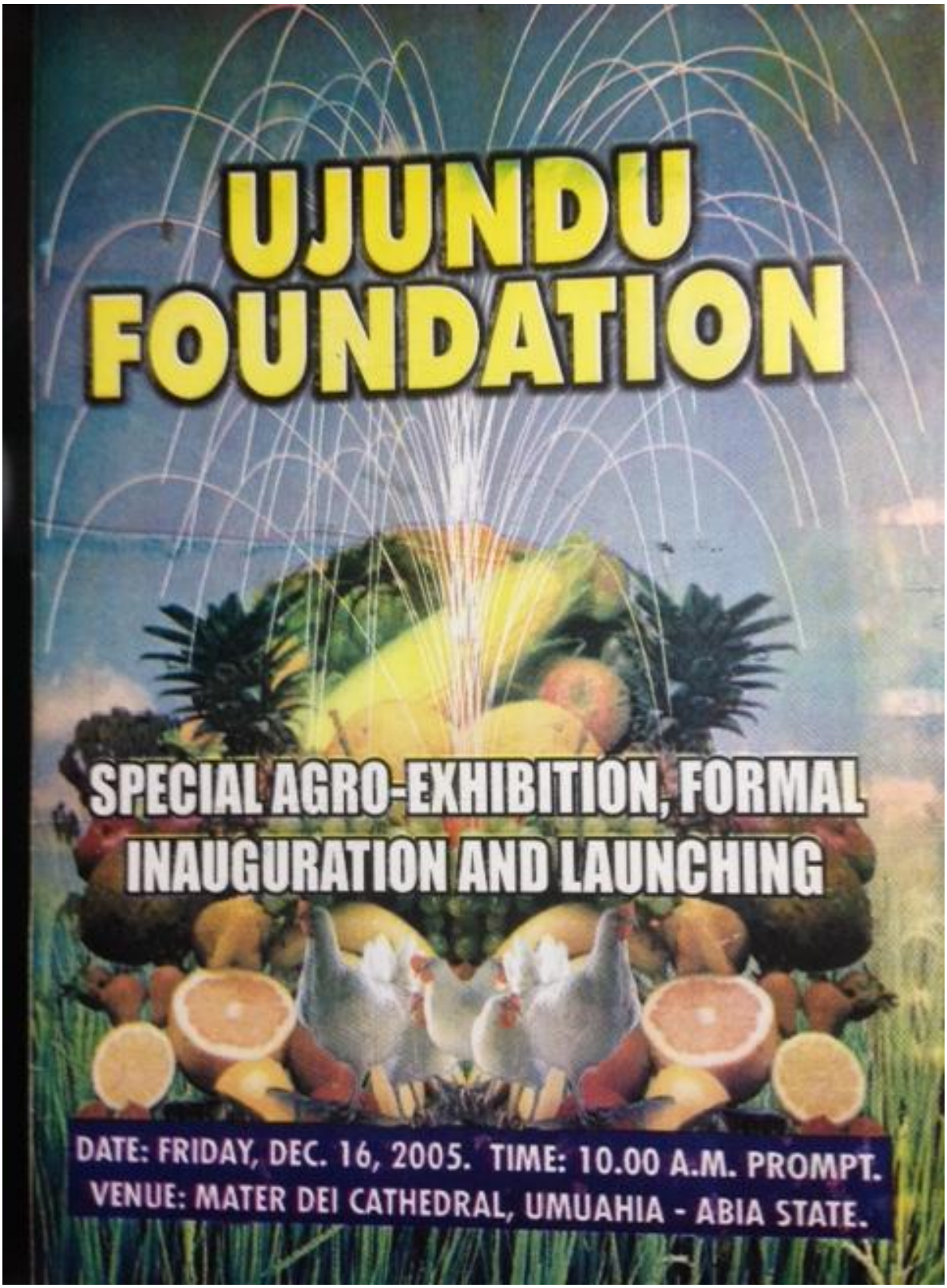

Plate 16: The Decades-long Gradual Evolution of Self in Agriculture Matures into UJUNDU Foundation